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NOTES FOR A LITERARY STUDY OF "THE HOUND OF HEAVEN"

Francis Thompson's poetic masterpiece, *The Hound of Heaven*, is now so widely read and studied that a literary interpretation of it seems called for. The present paper is an attempt to provide such an interpretation, but lays no claim to being more than a collection of notes on the subject. I have gathered them for class use and am passing them on for what they are worth.

I

How did the poem originate, and what was its object? Thompson completed it in 1891, immediately after his return to London from Storrington Priority, where he had gone for a rest after having been discovered by *Merrie England*, Mr. Meynell's literary magazine. At Storrington he had written the famous essay on Shelley and a lengthy ode, *To the Setting Sun*. Both of these works supply, as we shall see, valuable information about Thompson's reading and thinking at this time. *The Hound of Heaven* itself was written almost simultaneously with *Sister Songs*. The two poems were, in fact, designed to belong together and form a lyric sequence expressive of the poet's experiences and convictions. They should be read together: but since the verbal difficulties of *Sister Songs* cannot well be surmounted in the average classroom, occasional cross-references will suffice.

The primary object of the sequence was personal. It gives an account of Thompson's spiritual and literary career and expresses thanks for the mercy which Heaven has shown him. All in all, we may rightly say that he is testifying to the truth of the Scriptural promise, "Seek ye first the Kingdom of God and His justice, and all the rest will be added unto you." *The Hound*

of Heaven praises God; *Sister Songs* lauds God's creation. But it is clear that the poet had much more in mind than himself. He wrote for his age and about his age, in the hope that he might be for it "the poet of the return to God." The point has been made excellently by Mr. Albert Cook:[1] *"The Hound of Heaven* is the most synthetically representative of the movements of English and perhaps European thought in the nineteenth century that we have. We say synthetically representative and typical, because a careful examination of the poem will show that in his own individual experiences, there recorded, Thompson suffered, speculated and solved with his times." In other words, the barriers between the soul and its Master, as described by the poem, are those which Thompson realized that his age had erected.

It was the period of "the eighteen-nineties"—the period when literary men generally professed to be tired of morals and even of life. They and the world round about them had inherited all the ideals of the Romantic Movement but were finding them worthless. Wordsworth's conviction that mankind could be happy if it lived in a state of nature and obeyed natural laws gave way to Thomas Hardy's pessimistic theory that nature is ruled by a Malevolent Will. Science had promised much but had furnished very little lasting contentment. Modern skeptical philosophy, despite its many attempts, answered no question raised by the thirsty human mind. As a consequence, poets like Swinburne, Henley and Wilde wrote with the bitterness of despair, and sometimes with the eroticism of degenerates. Yet there were hopeful signs. Converts were swarming into the shelter of Mother Church. The second greatest poet of the period, Lionel Johnson, had become the profound Catholic critic of Hardy. Did it not seem as if the very disgust that was felt for modernism—the aged agnosticism and pantheism of the nineteenth century—was driving men back into the arms of God? Or was this, perhaps, one way He has of redeeming men's souls?

There is plenty of evidence, apart from the poem, to show that Francis Thompson reasoned this way about the time in which he lived. He was a student of the mystics, and so familiar with David Lewis' beautiful translation of *A Spiritual Canticle*, by St. John of the Cross, where he might read: "As the hart wounded

[1] *Dublin Review*, Vol. 160, page 109.

with an arrow cannot rest, but seeks relief on all sides, plunging into the waters here and again there, whilst the arrow, notwithstanding all its attempts at relief, sinks deeper in, till it reaches the heart, and occasions death; so the soul, pierced by the arrow of love, never ceases from seeking to alleviate its pains." St. John was primarily concerned with analyzing the stages through which a soul that wished to love God would have to pass. Thompson reverses the concept, and enumerates the stages of God's conquest of the soul that does not care to love Him. It is, of course, the other side of the same thing; but it is peculiarly suited to the psychology of the modern age.

If, bearing these things in mind, we proceed to outline the poem, it will become clear that Thompson is the relentless psychologist of his time. *The Hound of Heaven* is divided into four parts: a proem, and three stanzas. These are admirably unified, but each makes its own point. A tentative outline follows:

1. *Proem.*—It outlines the various peculiarly modern ways in which the soul seeks to escape the knowledge and love of God: the growth to age and the consequent pressure of worldly pursuits; psychological science; Romantic sentiment; bland optimism; pessimism. It also symbolizes the Divine affection for mankind.
2. *First Stanza.*—It dwells upon the general craving for comfort as illustrated in the modern reliance upon merely human friendship and love-union, emphasizing the futility of all this by showing, in a cosmic illustration, the real, poignant loneliness of every individual in this world.
3. *Second Stanza.*—It outlines the charm of the "simple life" so enthusiastically advocated by Wordsworth and Shelley, to whom there are several covert references. There is also a consideration of the value of science—its discoveries and promises.
4. *Third Stanza.*—It recounts the utter failure of the human soul's attempt to support its woes by idealism, imaginative interests, the arts and graces. The very ambitions felt by man are a reason why he finally senses his degradation. To some extent the stanza sums up the despair of the *fin de siécle* by bringing it to the feet of the Saviour. The language is rather noticeably liturgical, as if to make the point that a return to the *Church* is necessary.

A few brief reflections upon this outline are now in order. First, Thompson's poetic images for the various ideas introduced into the poem are strikingly modern and appropriate. What phrase could more adequately represent the complex psychology

of agnosticism—which Newman had followed and analyzed so subtly—than "the labyrithine ways of my own mind?" And though what we have termed the "cosmic illustration" in the second stanza,

> Across the margent of the world I fled,
> And troubled the gold gateways of the stars,
> Smiling for shelter on their clanged bars;
> Fretted to dulcet jars
> And silvern chatter the pale ports o' the moon,

is burnished with antique diction, yet the thing itself—the attempt to identify man with the physical universe, and to make its laws his only rule—is an up-to-date chimera which all of us are familiar with. In general Thompson's images are not hard to identify once we grasp the idea of the poem, and admit the immemorial privilege of verse to find imaginative forms for the abstract truths it wishes to discuss.

Secondly, it would obviously be a mistake to suppose that *The Hound of Heaven* is a complete statement of Thompson's views on the subject of such things as nature and childhood. It merely repudiates the false modernistic idealizations of these things: the deification of childhood, as in Swinburne's Child and Poet:

> No fame, were the best less brittle,
> No praise, were it wide as earth,
> Is worth so much as a little
> Child's love may be worth.

It protests against Wordsworth's acceptance of Nature as a "homely nurse" and his declaration that one could learn more about man in a "vernal wood" than from all the "sages" by saying, "Nature, poor stepdame, cannot slake my drought." Thompson understands very well that these things are valuable and beautiful if we have them with God, and not apart from God. Accordngly it is of interest to fill in the poet's words on these themes from his other works.

Sister Songs is as riotous in its thankful summary of the gifts of God as the façade of a mediaeval cathedral. Written as it was in Kensington Gardens during a week of radiant spring, it is warm with affection for the good things of nature. Thompson was not, however, a nature-poet of the highest order, having little direct knowledge of the lore of field and garden. Wilfrid Blunt's

diaries record the fact that Thompson could not remember the poppy and continually asked what it was; and all his friends noticed his indifference to botany. He looked at nature through the eyes of brother poets, so that most of his imagery can be traced to Shelley, Keats and Crashaw. Nevertheless he understood the significance of the natural universe very well, and loved such philosophies as those of Plato and Pico della Mirandola, from whom Spencer had also drawn.[2]

Childhood was one of his constant preoccupations. Every reader of *The Hound of Heaven* should learn how reverently the poet speaks of it in the *Shelley* and bear in mind this supremely beautiful passage from *Sister Songs:*

> Once, bright Sylviola, in days not far,
> Once—in that night-mare time which still doth haunt
> My dreams, a grim, unbidden visitant—
> Forlorn, and faint, and stark,
> I had endured through watches of the dark
> The abashless inquisition of each star,
> Yea, was the outcast mark
> Of all those heavenly passers' scrutiny;
> Stood bound and helplessly
> For Time to shoot his barbed minutes at me;
> Suffered the trampling hoof of every hour
> In night's slow-wheel'd car;
> Until the tardy dawn dragged me at length
> From under those dread wheels; and, bled of strength,
> I waited the inevitable last.
> Then there came past
> A child; like thee, a spring-flower; but a flower
> Fallen from the budded coronal of Spring,
> And through the city-streets blown withering.
> She passed,—O brave, sad, lovingest, tender thing!
> And of her own scant pittance did she give,
> That I might eat and live.

These lines, with those which immediately follow, show how deeply Thompson was interested in childhood, not only because to it there belonged the Kingdom of Heaven, but because it was often sadly neglected and tortured. The same idea recurs in his review of General William Booth's *Darkest England:* It drives

[2] One of the best discussions of Thompson as a poet of nature is that of Mr. Theodor Haecker's introduction to his German translations from Thompson. He makes a searching comparison with Shelley.

home a truth which I fear the English public, with all its compassion for our destitute children, scarcely realizes . . . "that they are brought up in sin from their cradles, that they know evil before they know good, that the boys are ruffians and profligates, the girls harlots in the mother's womb."

The point worth stressing here is this: Thompson cannot be read understandingly unless he is accepted as a poet of charity. Though he believed that the world is a transitory shadow of value only in so far as it shows us the Divine Reality, he did have the finest kind of love for those who suffered or had gone astray. The plight of Shelley worried him; he was harassed by the many materialisms of his time; and he felt that, almost in spite of what men were doing, the hand of the Saviour was out to rescue and to bring home. For this reason *The Hound of Heaven* becomes much more interesting and human when we see that it is not merely a personal confession but a kind of profession—a hymn to God who says to a tired and muddled world,

> All which thy child's mistake
> Fancies as lost, I have stored for thee at home:
> Rise, clasp my hand, and come!

What are the literary affiliations of the poem? This question is important because Thompson is in marked degree a derivative writer. He gathers his materials from the rich fields of traditional English verse. Mr. Arthur Symons is therefore implying a genuine critical truth when he writes: "If Chashaw, Shelley, Donne, Marvell, Patmore and some other poets had not existed, Francis Thompson would be a poet of remarkable novelty." The contemporary *Edinburgh Review* critic of *The Hound of Heaven* was keen enough to make a similar remark. All this does not lower our poet's mighty prestige, but it indicates that we cannot understand him unless we see where and why he gathered his materials, and to what use he put them. In the case of the present poem, this is particularly important because when Thompson discussed his age it was largely on the basis of what its poets had said. He accepted them as its mouthpieces, and often put their words into its mouth.

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(To be continued)

THE CONSTANCY OF THE INTELLIGENCE QUOTIENT

Ever since the intelligence quotient was devised as a measure of brightness in connection with Binet tests, its constancy has been the subject of detailed study. It affords an approach to certain phases of mental development and supplements other methods. If constancy is characteristic of the I.Q., educational prognosis is advanced in accuracy. There are, therefore, both theoretical and practical problems involved in the question of the stability of the intelligence quotient. A comparatively large amount of experimental work has been accomplished and well defined conclusions have been reached. It is the purpose of this paper to review the literature on the constancy of the Stanford Binet intelligence quotient and to include a brief discussion of some related topics.[1]

A number of different methods have been pursued in the study of the constancy of the intelligence quotient. Not all of these are equally valid. The use of any one of them demands the repetition of the Stanford and a comparison of the results obtained on the two or more examinations. The intervals between the series have varied in practically all investigations from a few days to several years. If the quotient is stable, the I.Q's obtained on the successive examinations should be approximately identical. The agreement between the results may be measured by the coefficient of correlation, by means of the probable error of estimate, and by the average difference between corresponding quotients of the two series.

The use of the correlation coefficient is the method most frequently employed. This method, however, is susceptible to influences that materially affect its usefulness. It is well known that the magnitude of this coefficient is dependent to a certain extent upon the variability of the scores from which it is derived. Unless the variability of the groups studied be known, it is difficult to interpret such coefficients correctly. As different investigators have employed groups whose variabilities have not been constant, it is at least dangerous to compare the re-

[1] A more detailed study of this problem with complete references, entitled "The Constancy of the Intelligence Quotient: A Review," is published as Educational Research Bulletin No. 7, Vol. I.

ported coefficients directly. A second limitation of this method arises from the fact that simple correlation coefficients indicate but little regarding the probable amount of variation in individual cases. Knowing other facts, the probable differences may be estimated, but these supplementary facts are not always reported.

A second method has been employed in some studies of this question. This method employs the probable errors of estimate and of measurement which are derived from the correlation coefficients and the measures of variability. The probable error of estimate indicates the amount of departure of the quotients from perfect correlation, while the probable error of measurement reveals the amount of departure of the obtained quotients from perfect correlation with their corresponding set of true quotients. Obviously these measures should be as small as possible. The use of either of these methods avoids some of the limitations attached to others.

The third method is that of the average difference between the individual quotients of the two series of measurements. This measure is readily interpreted but has not been used as frequently as that of correlation. Average differences may be given for the entire group, for the gains and for the losses. The greater convenience of this method should commend it for such problems as the constancy of the intelligence quotient.

Not only these methods but also other conditions of the experiments have varied so widely in the different investigations as to render it necessary to examine them critically. Probably the most important limitation attached to a large number of the studies consists in the use of different revisions of the Binet tests for the two or more series of examinations. Some authors have employed the Goddard 1911 revision for the first tests and the Stanford for the second, while others have used the Kuhlmann and other modifications of the tests at different times. As these various revisions are not exactly comparable, the results secured cannot be accepted as valid. All studies in which revisions other than the Stanford have been employed may accordingly be omitted from consideration. The number of studies that contain this limitation is unfortunately large, but to include their results would detract from the accuracy of the conclusions.

There is not only the general problem of the constancy of the

intelligence quotient but also the questions of its stability among normal, retarded, and superior children. It is desirable that these groups should be kept distinct as the level of intelligence has been considered a factor in the stability of the I.Q. In some investigations, all pupils, regardless of their level of ability, have been grouped together. When this procedure is adopted some of the significance of the results is always lost. The groups should be as homogeneous as possible in regard to level of intelligence, age, language difficulties, home conditions, sex and other factors that may conceivably influence the results. As in all problems of educational psychology, the validity of the conclusions rests in part on the accuracy of the methods.

The results that have been secured may be reviewed separately for normal, retarded and superior children. Only those investigations that have made this distinction need be considered. For normal children and employing the correlation method, coefficients of 0.85 and above are the rule rather than the exception. The median or average difference is usually in the vicinity of 5 points and in some instances less. Correlations above 0.90 are found with considerable frequency. A few selected at random may be cited in support of the above statements.

Dickson:	0.90	N. 288.
L. S. Rugg:	0.948	N. 114.
Garrison:	0.88	Interval of 1 year.
	0.91	Intervals of 2 years.
	0.83	Intervals of 3 years.
Gray and Marsden:	0.843	1st and 4th examinations.
	0.839	2nd and 4th examinations.
	0.834	3rd and 4th examinations.
Terman:	0.93	N. 435.

All of these correlations have been obtained from the reexamination of normal children. The most noteworthy characteristic of these results is the close agreement between successive tests. These results indicate beyond any reasonable doubt that, for groups of normal children, the intelligence quotient is practically constant. Further investigations by others verify these results and conclusions.

The question of the constancy of the I.Q. among subnormal and feebleminded children may be considered separately. It is

maintained by Dickson, Terman, and others that the stability of the intelligence quotient is independent of the level of intelligence, and that the results obtained are the same as those found in the case of normal children. A summary of the investigations of this phase of the general question will indicate the extent to which this is true. Investigations in which different revisions have been used or in which normal and retarded children have been grouped together may be omitted from consideration. Berry's obtained coefficients of 0.74, 0.67, and 0.56 for intervals of 11, 23, and 35 months, respectively, for groups of retarded children in the Detroit schools. These results indicate that, in this instance at least, the I.Q. has not manifested the constancy that is typical of normal groups. The age range in this study was considerable, and in the light of other considerations the results require confirmation from other sources before total acceptance. Henmon and Burns claim that there is a tendency for the I.Q. to decrease somewhat among borderline cases as well as among the truly feebleminded. This tendency to decrease is particularly evident among those whose initial quotients were between 60 and 80.

Poull's results indicate an average gain of 1.26 points for a group of 126 feebleminded cases. Upon this measure Poull, and subsequently Dickson, base their assertion that there is no tendency for the intelligence quotients of feebleminded individuals to decrease with increasing age. Rosenow supports this contention with the statement, but without acceptable evidence, that neither the facts nor the arguments justify the contention that there is a type of individual whose I.Q. tends to decrease with increasing age. In accumulating his results Rosenow employed six different examiners. Both the Stanford and the 1911 revisions were used. When conditions such as these prevail it seems most unwise to express dogmatic conclusions. Peters has also adopted the theory of decreasing quotients in the case of the feebleminded. Both Kuhlmann and Wallin maintain that there exists a definite tendency to decrease on the part of the I.Q. for individuals of the feebleminded grade of ability. In both cases, however, their evidence may be criticized from several points of view and cannot be admitted into the final estimate of the results.

There is a considerable body of evidence to prove that the

age of cessation of intellectual development varies according to the level of intelligence. This age is earlier for retarded children than for normals. If this is true, there is an unavoidable tendency for the intelligence quotients to decrease as chronological age continues to increase after the probable age of cessation. Should intellectual development stop before 16, the I.Q. would necessarily become lower from the time that mental development began to decrease in rate until 16 when further increments in chronological age are disregarded. While it is doubtful if the age of final cessation among the feebleminded is below 16, it is very probably true that they do reach the period of decreasing rate of development before normal children. There will, therefore, be a corresponding decrease in their I.Q.'s as age increases. This view is opposed to that of Terman, Dickson, and others. While the problem is not finally solved, the available evidence indicates the probability of decreasing quotients among the feebleminded and to a lesser extent among retarded children after the onset of adolescence.

This decrease does not imply a deterioration in intelligence as Rosenow seems to infer. The definition of the intelligence quotient as the mental age divided by the chronological age shows that if chronological age increases up to 16 years for the purposes of the test and mental development ceases or even decreases in rate before that age, there will be a corresponding decrease in the I.Q. but the mental age will remain constant or even increase. There may be individual cases of mental deterioration, especially under the influence of secondary factors, but the fundamental problems of the constancy of the I.Q. and of mental deterioration should not be confused.

Practically the only evidence on the constancy of the intelligence quotient among superior children is that presented by Baldwin and Stecher. Other investigations have contained data on this problem but have not separated the superior from the normal cases. It is necessary to point out in this connection that the I.Q.'s of very superior children cannot maintain their constancy indefinitely. The highest mental age obtainable on the Stanford is 19 years 6 months. As chronological age increments beyond 16 are disregarded, the highest I.Q. obtainable is 122. Consequently all quotients formerly above this point must descend to it as age increases. There is, therefore, an unavoid-

able necessity for all I.Q.'s above 122 to decrease with age on account of the nature of the tests from which such measures are derived. The constancy of the I.Q. among bright children must be considered in the light of this fact. As in the case of the feebleminded, this does not imply any deterioration nor even decreased rate of development. It merely indicates the inability of the Stanford to estimate accurately very superior degrees of native ability.

The data reported by Baldwin and Stecher show that the constancy of the I.Q. prevails among superior children as well as normals and retarded children below twelve. There is a greater tendency among superior children for the I.Q. to increase on repeated examinations on account of the greater ability of such children to profit from practice. The practice effect is unavoidable but generally small for the majority of children on this test. Baldwin and Stecher have given as many as six tests to the same children, and the intercorrelations are uniformly high.

This brief and partially inadequate review shows that the available data indicate the tendency for the intelligence quotient to remain constant for practically all grades of intelligence with the exception of the feebleminded and the superior after age twelve or thirteen. There are, however, individual cases where the I.Q. shows marked changes on successive examinations. Several of these cases have been reported in the literature, and others are familiar to those who have employed the Stanford extensively. These cases are important in calling attention to the fallibility of such measures of intelligence and to the factors that contribute to variability of I.Q.'s. As these factors are frequently present and always tend to decrease the validity and reliability of test results, they may be reviewed briefly. Their relative importance is unknown, and they may be listed at random.

The fact that there are more often increases than decreases on second and subsequent tests indicates the probable influence of practice. As children profit to different degrees from familiarity with this test, practice effects constitute a variable error of measurement.

All types of physical conditions, including fatigue, have an unmistakable effect on the intelligence quotient. This effect will

vary with the nature of the condition. The amount of this influence is difficult to appraise.

Emotional and volitional variations will obviously produce variations. Effort, interest, and many other factors all possess influence which is virtually always in the direction of variation rather than constancy.

In many of the experiments that have been reported, several examiners have participated. It is impossible to state what effect this has had. Theoretically there should be no variations introduced in this way where the examiners are well trained. But it is frequently reported that the examiners were students, and while their scoring may be checked, their methods, attitudes, personalities, and other traits do influence the results and cannot be observed in the responses of the children.

The structure of the Stanford is such that in many cases the I.Q. cannot remain exactly constant. An initial I.Q. of 115 would necessitate a gain of 13.8 months per year for absolute stability, but this amount of mental age cannot be measured by means of this test. Some variation is accordingly introduced. The same effect is produced by the majority of quotients.

Language defects play an important part on the Stanford. This is especially true in the case of children who enter schools from foreign language homes and whose initial test result is below their true capacity through their language disability. A few months in school may alter this condition and considerable change be effected in the scores through improvement in this function. Results in the case of such children must always be interpreted in the light of this possibility. Changes in language ability will obviously affect the stability of the intelligence quotient.

A very strong tendency away from constancy is found in the marginal successes and marginal failures. A child may *just* fail on a test the first time and within a short interval *just* pass if the test is repeated. These marginal failures and successes seriously disturb the constancy of the I.Q., particularly when the intervals between the tests are short.

Psychopathic traits produce variability. It is a well recognized fact that children manifesting psychopathic tendencies are more variable in their performances than children who do not possess such characteristics. In such cases the I.Q. has been

found to be less constant than it is for unselected or normal children.

Scattering of successes at the upper end of the scale and of failures at the lower extreme with consequent incompleteness of the examinations decrease the constancy of the I.Q. Scattering is found more frequently among retarded and psychopathic children than among normals. The range of tests used may be incomplete on account of the failure of the examiner to detect tendencies to scatter.

School experience undoubtedly affects certain tests, particularly the construction of the sentences in the nine-year tests, the rhymes of the same year, the arithmetic tests, the definition tests of year eight and a number of others.

The influences which the factors of age, amount of intelligence, and intervals between the tests exert have been disputed. The more liberal advocates of the constancy of the I.Q. maintain that these factors have a negligible influence, though a study of the available data discounts their claims to some extent. The effect which amount of intelligence has upon the constancy of this measure of brightness has already been discussed. There is undoubtedly a slowing down of mental development among the retarded and especially among the the feebleminded before the age of sixteen, and any such influence will be manifested in a tendency for the I.Q. to decrease. The nature of the Stanford scale accounts for the lowering of the I.Q.'s of very superior children with increase in age. There is, therefore, some relation between the level of intelligence and the constancy of the intelligence quotient, though no radical differences are caused solely by this factor except in the case of exceptionally high ability.

The influence of varying intervals between the tests is also positive. This is shown by the data presented by Cuneo and Terman. The correlations between tests at an interval of two days was 0.95, at intervals of from five to seven months the correlation was 0.942, but the agreement dropped to a coefficient of 0.852 when the intervals were between twenty and twenty-four months. Other investigations have yielded similar findings. Repeated examinations by Baldwin and Stecher show decreases in the correlations between the first and all subsequent tests in order. While the decreases are in most cases comparatively small, they nevertheless exist and indicate that the length of

the interval between tests does influence the constancy. The position taken by Terman, Dickson, and by Gray and Marsden requires modification in the light of these results.

The influence of age is also to be noted. Retests by Cuneo and Terman on a group of kindergarten children yielded correlations well above 0.90 which has been interpreted as indicative of the independence of age differences by the I.Q. In a more complete study of young children Mrs. Woolley found much greater variability. Factors which are relatively unimportant among older children affect the results among younger children more seriously. The influence of interest, attention, emotional factors, and other disturbing variables is much greater among younger children than among older subjects, and corresponding changes are found between the I.Q.'s on repeated examinations.

In the light of these results the conclusion stated by Dickson that the average difference between the first and second tests is nearly the same, regardless of age, intelligence, or time interval, requires modification. It is not justified by recent results. Others have subscribed to the same opinion without the evidence that is reported here.

All the influences that have been noted tend to decrease the constancy of the intelligence quotient. Not all are operative in every case, but practically all are potential sources of unreliability. Cases of marked changes in the intelligence quotient are sufficiently frequent to dissipate any tendency to dogmatism and yet exceptional enough to warrant regarding the I.Q. as fairly stable.

While noting these changes it is necessary to call attention to the generally accepted fact that no authentic instances have been cited wherein children develop normally up to a point and then suddenly cease their mental growth and become feebleminded. Such a condition does result from accidents and disease, particularly those affecting the central nervous system. Neither the evidence from the constancy of the intelligence quotient nor from any other source justifies the contention that such a type of case exists. Nor are children feebleminded up to a certain point and then become normal. These highly imaginative types of cases have received some attention, but the evidence has not been conclusive and general experience contributes no basis for any such hypothesis. Excluding accidents

and disease, children who develop normally at first continue to develop normally throughout. Children who develop at the feebleminded rate at first continue at this rate throughout the growth period and never attain a higher level.

While the intelligence quotient is not mathematically constant, it is sufficiently stable for general purposes. While large changes, particularly increases, are sometimes found, a closer inspection of the data will usually reveal the extraneous influence of such factors as have been enumerated in this paper. Changes of as much as twenty points do not occur more frequently than once in a hundred examinations. When the results of intelligence tests are supplemented by other information, mistakes will seldom be made. The remarkable feature of the I.Q. is not its tendency to vary but its tendency to remain constant.

The constancy of the intelligence quotient has supplemented other data in indicating the regularity of intellectual development. It has also confirmed the possibilities of the I.Q. as an indicator of school progress and success.

While these conclusions appear to be substantiated by the information so far available, there are other problems still awaiting solution as well as results awaiting confirmation. In the approach to these problems it will be necessary to provide more adequately controlled conditions than have prevailed in many of the investigations hitherto reported. Among some of the more important problems requiring experimental investigation are, the tendency of the I.Q. to decrease among feebleminded children and the relation of this tendency, if any, to the degree of subnormality, the influence of adolescent physical changes on the intelligence quotient, the influence of environment, particularly that of the nursery school, on the intelligence quotient, and many others. The present status of this question opens up new vistas and invites cooperative experimentation in this phase of genetic psychology.

T. G. FORAN.

SOME RESEARCH FINDINGS IN THE MORAL DEVELOPMENT OF THE PRE-SCHOOL CHILD

A study of the *moral development* of school children made by the author[1] has revealed much material of pedagogical value. In this study, the age at which children enter school (i.e., six) was taken arbitrarily as the plan to begin a consideration of the moral development. One of the very surprising results of the data gathered was the number of moral concepts of which children of six are aware. A second problem of value suggested itself from the result—namely, to trace through the years below six, the appearance of these moral concepts. For this purpose a group of little children, consisting of forty-seven girls and forty boys, ranging in age from one year to six years, were examined. None of these children had ever been to school; practically all were from Catholic homes of the middle and poorer working classes.

The method of gathering the material was a questionnaire which consisted of seven questions and required from five to ten minutes to administer orally. The distribution of cases at the different ages was as follows:

Age	1	2	3	4	5	Total	No. of Cases
Boys	1	0	5	14	20	40	
Girls	0	1	11	19	16	47	87

The form of the questionnaire is given below:

1. Name three things it is good to do. (If the child does not understand the question, use the form, "Tell me three things it is good to do.")
2. Name three things it is bad to do.
3. What one action do you think is the *best* a person can do during his whole life?
4. What one action do you think is the *worst* a person can do during his whole life?
5. Why were you made?
6. Who made you?
7. Where does a good little boy (girl) go when he (she) dies?

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[1] McGrath, Marie C., "Moral Development of Children." Psychological Review Pub. Co., Princeton, N. J., 1922.

Sister Mary, "Research Findings in the Moral Development of Children." The Catholic University Educational Research Bulletin, Vol. I, No. 6, 1925.

The study made of the moral development of the school children, and in this report of pre-school children, is primarily a study of moral *knowledge*, not of moral *action*. Further research, and of a type very difficult to carry out, will be required before the relationship existing between these two, knowledge and action, can be ascertained for individuals and for groups of individuals. However, it may be legitimately postulated that moral *knowledge* is a prerequisite to *rational* moral action. Understanding is necessary for intelligent "doing."

It was found that the moral development of school children fell into three well-defined stages: (1) An appreciation of *duty* to *God;* (2) an appreciation of *duty to oneself* and to an *individual companion or neighbor;* and (3) an appreciation of *duty* to *social groups*. The first and second stages were revealed as present in the answers of the average six-year-old, but the highest percentages belonged to the concepts included in the first stage, *duty* to *God*. The third stage was found to belong to a later period of development.

These stages of development were attained by the analysis of the answers given to the questions:

1. Name three things it is good to do.
2. Name three things it is bad to do.
3. What one action do you think is the best a person can do during his whole life?
4. What one action do you think is the worst a person can do during his whole life?

These questions are of particular significance because they limit the answers of the child to the moral sphere, (e.g., to things right and wrong), and because they call forth from the child spontaneous answers. It is presumable that there being nothing to inhibit the reaction, a child asked to name, for instance, *three things it is good to do,* will give those things uppermost in his mind. These will be things that make up his life at the time—his interests. Thus, in considering large groups of children through all the school years, the concepts of chief interest at the different ages make themselves apparent.

In presenting the four questions just named to the pre-school child, the purpose in view was to find the age at which the concepts present at six, appear for the first time. The cases at one

and two years gave no response to the questions. The concepts mentioned by the three-year-olds are as follows:

Good-to-do		*Bad-to-do*	
Boys	*Girls*	*Boys*	*Girls*
To play	To play	To be disobedient	To be disobedient
To write	To work	To swear	To be disrespectful
To be obedient	To be obedient	To slap children	
	To help mother	To write in church	

In all cases obedience and disobedience are mentioned twice as frequently as any other act. All the acts mentioned, it is interesting to note, are actual experiences in the life of the child.

At four boys add "jig" as a *good thing* to do; girls, to "curl your hair." For *bad-to-do,* boys at four add "to wash"; girls, "to say bad words," "to cry," "to steal," "to hurt yourself," and "to break things." None of these concepts which enter at four are especially significant except, perhaps, the indication that is found here of the earlier age at which boys learn that "stealing," "swearing," "fighting" are not desirable things to do.

It is rather the omission of certain concepts in the pre-school child that we consider of importance. The school child at six mentions most frequently, as *good* and *bad* actions, the performance of some religious duty. These are always mentioned in concrete form and are always definitely religious. Why should this "sudden awakening" to consciousness of religious acts take place at six? There can hardly be any doubt of the fact that it is, because the child is then, for the first time, brought into a religious atmosphere—the school. It cannot be, however, that he is incapable of appreciation of these ideas *until* he enters the school. We shall discuss, a little later in the paper, the significance of this lack of training to the child and to the mother. Here it will suffice to point out the lack of religious atmosphere being so apparent in the home, how necessary it is that the child go to the Catholic school *in the first grade.* There is no justification possible for the further deferring of so important an experience as the awakening of the child's religious consciousness. We hold, although we are not prepared to prove it at present, that on this awakening of religious consciousness depends the child's moral development at this period.

The last three questions of the group are also borrowed from the original study. They form a series of inquiries on funda-

mental things of life. The mind of the child, because it is a human mind, must answer each of these questions at a comparatively early age. Inquiry concerning self (the very proximity of self necessitates it, of course), takes the same form as any other inquiry; that is, it looks into the answers of the four fundamental questions concerning knowledge of anything, e.g., *Who made it? What is it made of? What is it good for?* and, *Why was it made?* The three questions, "Why were you made?" "Who made you?" and "Where does a good little boy go when he dies?" are merely other forms of these fundamental inquiries. It was found that practically all children of school age are able to answer correctly the last two of these questions; while between 50 and 60 per cent of the six-year-olds are able to answer the first one satisfactorily. The age when the concept first appears is, therefore, below six for all of these questions.

Of the single cases questioned at the age of one, and at the age of two, neither answered any of the questions presented to them. At the age of three, 50 per cent of both boys and girls answer correctly the question, "Who made you?" No attempt was made to investigate the child's idea of God. But to Him, whatever the concept of His nature may be, these children have learned to attribute their being. This should not, however, be surprising. The word "God" is so simple a one, and His importance should be realized as so great by every Christian, that with the increase in vocabulary and the familiarity with things and ideas of everyday occurrence, it is, rather, to be wondered at that 50 per cent of the three-year-olds have missed the concept. Certainly God cannot have been very frequently mentioned in their midst, or natural interest and zest for the new would have given Him a firm hold on the developing mind. However limited the concept may be as to its meaning, the beginning of the "idea," true in its inception, should be there. At four, the appreciation of this concept is perceived by 80 per cent of the girls and about 60 per cent of the boys; while at five, 95 per cent of the girls and 100 per cent of the boys attribute to God their creation. By the age of five, then, practically all children have had brought before them in some form the concept of God and their relationship to Him, i.e., that He made them. However limited the child's realization of God may be at this time, there are no atheists at the age of five.

The question, "Where does a good little boy go when he dies?" receives a correct answer from 20 per cent of the three-year-olds. The fact that it is a *good* little boy who dies will undoubtedly suggest the future life with its reward if this concept is present in the mind of the child. It would probably be a very exceptional[8] child below the age of three who had solved the problem. At four, about 30 per cent of the children answer the question correctly; while at five, the percentage has risen to eighty. The age of five is, therefore, a year of awakening to this concept for the average child.

We may question, however, whether the average child is not capable of forming a correct idea of this problem a year or even two years before this age. In other words, if the average child were given a truly Christian atmosphere in the home, would he not by the age of three be capable of comprehending in his childish way that Heaven awaits the good little boy when he dies. Death itself is, of course, a mystery to the child; and yet it was not found, in questioning the three-year-olds, that the idea of death was a strange one to them. It is probably only the exceptional case, or the case of the child exceptionally protected, who has not met or heard of death by the age of three. The unfortunate circumstance in regard to many of the 80 per cent of the three-year-olds who could not answer the question, and most of the 70 per cent of four-year-olds who answered incorrectly was, not that they knew death, but that they knew it from its most ugly side. The *good* little boy was "put in a big hole," or "put in the ground." These children had met death, and to them it meant only the horrible physical end that must make each individual, whatever his age, quiver with horror.

Children, we believe with the late Mother Stuart, have little difficulty in accepting and appreciating the beautiful aspect of death; the morbid fear of the physical dissolution, a pagan idea conceived through lack of hope, has no right to intrude itself on the mind of the little child. If the first concept of death is the

[8] In the use of the words *exceptional* and *average* in describing the moral concepts of children in this group, the author has reference to them relative to the unselected group from which they come; the words are not to be understood to mean exceptional intelligence or exceptional moral appreciation, or even exceptional moral environment, because one or all of these factors may be necessary to give the suggested result.

physical one, accompanied, as it must be, with this ugly fear when the idea is applied to self, is it possible that the child will ever be able to understand the truly Christian meaning of the term? Is it not possible, too, that the fear of God's inexorable justice, by which so many persons account for the morbid terror and consternation they experience on seriously thinking of death, may be rooted in such a materialistic concept of dissolution, formed in early childhood?

"Why were you made?" is not answered with an altruistic motive by the average child in the parochial school before he is eight years old. It is not answered by the average public school child before he is twelve, however. Have the Catholic children received definite instruction in their purpose in life, or is it the school atmosphere which is accountable for this marked difference? It is, perhaps, both. The child in the Catholic school learns the answer to the question of the catechism, "Why did God make you?" in the first grade. "Why were you made?" is purposely of a different form. As it is asked, "you" becomes a concept of great interest. To the Catholic child, it always means "my soul"—not "my body"; at least there is no attempt to differentiate the two parts of his being. To God is attributed his creation, always. Very often in children who have not had this training it is the origin of their physical being for which they try to account. "Why were you made?" is given such an answer as, "Because my mother loves children." This reveals an incomplete idea of their own individuality and identity, and also of their personal responsibility in life.

An altruistic answer was considered correct for this question. From the very nature of the question, one could not expect a religious answer; and it was found that no religious aspect was mentioned in most cases. The important point in the answers seems to be, at the earlier ages, the realization of concrete helpfulness as an aid to happiness for oneself and others. It is this idea, concretely expressed, that we term *altruism* in this childish period. At six—that is, the children in the first year of school—about 60 per cent gave some altruistic motive in this concrete form as the reason why they were made. At five, the oldest of the pre-school ages, approximately 10 per cent have this altruistic appreciation. The others "do not know" why they were made. The appreciation of the concept appears first at the age

of four, however; and at this age, also, is mentioned by about 10 per cent of the children. May not this sudden change from 10 to 60 per cent be attributed to the social and religious atmosphere of the school? Direct instruction of the primer class, in the ways in which they can and should "help mother" and others in the home, has marked effects upon the conduct and attitude of the children, as both mothers and teachers testify.

A naive example of this is strikingly amusing. At the opening of school the Sister in charge of the first grade undertook to "socialize" her little pupils, especially in regard to their home relations. Several lessons on the beautiful spirit of kindness and helpfulness of the Infant Jesus to our Blessed Mother in the little home at Nazareth were given. The children were urged to "imitate the little Infant Jesus" in their own homes. One day of trial evidently produced remarkable results in the case of a little girl, who with truly childlike simplicity confided jubilantly to Sister the next morning that "mamma said she wished you would have us be like the Infant Jesus every day." This, in a less amusing form, is the common experience of teachers in the primary grades. There is a power of influence in the religious motive set up concretely as an ideal for the child to imitate, which completely transforms the individual.

An important problem is that of the way in which this ideal may be brought into the child's life before he enters the schoolroom. The problem has two chief aspects—the mother and the child. Judging by the change that takes place in the children during their first year at school, the influence of pre-school home-training would most certainly be greatly beneficial to them. But as great a transformation, perhaps, would take place in the thoughts and attitudes of the mother. Surely the undertaking of this training would lighten her tasks and make for greater happiness in the home. No doubt it would prove, too, of great spiritual profit to her. One of our great fears at the present time concerns the instability of the home. The stability of the home is largely dependent upon the mother, in the individual case; upon the ideal of motherhood in society as a whole. It is the *ideal* of motherhood that has fallen in our society—her duties have been declared burdens; her most sacred privilege, chains of slavery. These unfortunate principles must act, of course, as so much acid dissolving the bonds of home life. Only

too frequently their influence is felt in the home that should be Catholic. Home becomes a mere house; pleasure and excitement become ends of living; children are entrusted to servants or, more often, to themselves until they are old enough to go to school. In such a home the words of the old song are verified, "Mother's heart is turning to stone." Is she happy? Whoever heard of happiness in a heart of stone! Even while we protest against the injustice and the dangers of such a condition, thoughts of compassion must rise for the shriveled soul of the woman who has narrowed her life to exclude all happiness. Feminists may sneer it is old-fashioned to believe that woman's happiness is bound up in the "drudgery of the home"—and we can only answer that it is "old-fashioned" history! Facts cannot be gainsaid in this scientific era—and that duties, even drudgery, done through love bring happiness, is one of the facts of life. If only mothers can be *inspired* to begin the religious training of the child at home, to begin it even when the little one learns to talk and walk! If only mothers can be inspired as the tiny pupil of the primer class was to "imitate the Blessed Mother" in the home of Nazareth! If only, and it means this practically and tangibly, the mothers can be inspired to live the life of faith with Christ, that all Christians worthy of the name must live, what a change can be wrought; what torrents of happiness will flow into their lives! The lack of the spiritual ideal in the actions of the little child points to a lack in the home, and, therefore, in the maker of the home, the mother. This suggests a very practical type of "moral clinic" to which we could give whole-hearted cooperation. For ignorance on the part of the mother, of what to do and how to do it, is much of the difficulty in the home training of the child.

To summarize: (1) Pre-school children show practically no religious consciousness in spontaneously named actions. This points to lack of religious training in the home.

(2) Children at three are capable of certain concrete ideals, i.e., obedience, not hurting others, helping mother.

(3) The precocious child at three and the average child at five knows that God made him.

(4) The average child at three has answered for himself the question, "Where does a good little boy go when he dies?" from

a materialistic point of view—only the exceptional child at this age has learned of the spiritual element involved in death.

(5) The exceptional child at four or five answers in some concrete way the question, "Why were you made?" More than half of the six-year-old children are able to answer the question, however.

(6) In the life of the child, the study emphasizes the importance of training and seems to indicate that the capacities of the child for moral and religious development are much greater than his opportunities in the pre-school period.

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RECENT RESEARCH ON THE GIFTED CHILD

I. PERSONAL AND SOCIAL CHARACTERISTICS

The advance of civilization depends surprisingly on the man of genius. Without men of outstanding ability, art and science would be at a standstill. Herein is one striking difference between brain and brawn. In the purely physical realm quantity can compensate for lack of quality. If no giant is available to lift a certain stone, two or three ordinary men can do it. If one expert bricklayer cannot be hired to build a certain wall in a week, probably two mediocre workmen can. But it is not so with the things of the mind. If one dull boy cannot solve a problem in analytic geometry, then a hundred, or a thousand, equally dull boys cannot do it. The cooperative effort of a million morons could never draw the plans for a satisfactory dwelling house; one good architect could. No number of average intellects, working together, could equal the achievements of the solitary geniuses who conceived the theory of relativity, who synthesized thyroxin, or who wrote the choruses of the *Oedipus Rex*.

It seems almost inconceivably stupid that society has left the training of the gifted child to pure chance. We have spent our millions erecting asylums for the feebleminded, and we have striven, not very successfully, to work out special curricula for them. We have spared no expense to focus the latest scientific results on the problem of delinquency. In the meanwhile the gifted child has been sitting in our classrooms, doing work far, far too easy for him, and receiving only casual attention from us, until he either threw up education as too much of a bore and got a job, or else until he muddled through the grades, the high school, and the college to the university where his true worth was appreciated for the first time after more than a dozen wasted years.

Fortunately a change for the better has been gradually taking place. The impetus has come largely from the development of mental tests. Thus we have at hand, for the first time, a technique which enables us to select from the general school popu-

lation the children of exceptionally high intelligence. We have not at present any equally good tests for picking out children of exceptional musical or artistic ability, but, here too, a start is being made. In the meantime it is worth while to review the rapidly growing literature on the child of unusual intelligence, as indicated by the standard intelligence tests. It is in this sense that the term *gifted child* is employed in the present paper.

It is well to recall at this point the fact that the expression *gifted* has only a relative significance, like the word *tall*. Human ability, as far as we have been able to discover, is distributed in a continuous curve from the very highest to the very lowest. The gifted are not a class apart. Normal shades into superior and superior into very superior by imperceptible gradations. The definition of a *gifted child* is purely arbitrary and depends on the point where one draws the line. Thus, in the Detroit school system the "X" classes are made up of the most intelligent 20 per cent of the school population. On the other hand, there is a school in New York (P. S. 165, Manhattan) which has a class made up exclusively of children testing at or over 150 I.Q. This corresponds to a degree of intelligence which probably occurs only a little oftener than once in every thousand unselected children.

The children who are only a little above the average, like the children in the Detroit "X" classes, present their own pedagogical problems, and an interesting paper might be written about them. The present article, however, will be concerned with children of a rarer degree of intelligence. It is becoming more or less conventional to define a gifted child as one with an Intelligence Quotient at or over 140. This degree of intelligence may be expected to occur two or three times per thousand children. The latest and best figures on the frequency with which various degrees of unusual intelligence may be expected to occur is found in Terman's (26) California study of gifted children. This study, which cost more than $40,000, involved a survey by trained investigators of a school population of about a quarter million pupils in various California school systems. It is interesting to note the frequency of various degrees of intelligence. Out of the 250,000 children in the survey:

1	had an	I.Q.	of	200	or	over.
3	"	I.Q.'s	"	190	"	"
13	"	"	"	180	"	"
40	"	"	"	170	"	"
112	"	"	"	160	"	"
309	"	"	"	150	"	"
618	"	"	"	140	"	"

Terman feels that the figures should perhaps be slightly higher, since some children were undoubtedly passed over in his survey. Before the publication of these figures, it was generally believed that children of high I.Q. were to be found much less frequently than this. Thus in 1916 Terman (27) himself had estimated that not more than one child in 10,000 reached 155 I.Q. According to the California study, about one child in 2,232 reaches not 155, but 159 I.Q.

All investigators agree that, on an average, gifted children come from superior ancestry. Yates (33), after studying the 25 brightest seniors in the Oakland schools, estimated that nearly three-quarters of her group were of superior mental heredity. The Almacks (2) remark on the tendency for gifted children to come from superior homes. Dashiell (7) compared the intelligence of the children of University professors with that of village children attending the same school, and found that the superiority of the former was as marked in non-verbal as in verbal tests. Visher (30) found that clergymen father 2,400 times as many of the notables in *Who's Who* as laborers do, in proportion to their numbers. Cobb and Hollingworth (5) found that the siblings of superior children themselves constituted a very superior group. They also found a general tendency for the brightest children in the group of gifted to have brighter siblings than the less exceptional gifted children. A number of investigators have made use of Taussig's classification of occupations into five classes, of which class one represents the highest type of occupation and class five (unskilled labor), the lowest. Jones (20) found class one, which constitutes only an insignificant part of the general population, contributed 56 per cent of her group of gifted children, while the enormously larger class five was represented by only 1 per cent. Haggerty and Nash (15) found that the children of parents in successively lower occupational groups yielded successively lower I.Q.'s. Terman (28) reports that the

children in his group came from "superior" homes on the average, that their "physical heredity" was above the average, that almost a quarter of the 62 members of the Hall of Fame were known to be related to one or more of his group of about 600 gifted children, and that an intensive study of 182 random cases showed the median family income for the gifted group to be $3,200. To sum up, the gifted child is much more likely than his fellows to come from a superior home and to have superior parents.

Even more interesting are the results on the physical condition of the child of superior intelligence. The traditional picture of the child prodigy was the little, wizened, short-sighted, delicate boy who was accompanied to school by his nurse and who never mingled in the sports of his normal fellows. Fortunately this picture is being knocked into a cocked hat by a constantly accumulating mass of evidence. Terman (26) had 783 gifted children—of whom 591 belonged to the experimental group referred to above—examined by two specialists in children's diseases. The conclusion was that the group was noticeably superior physically to unselected children of corresponding age. Their general health was above the average. There was less nervousness. Anthropomorphic measurements showed the gifted to be taller and heavier than unselected children of the same age. Hollingworth and Taylor (18) compared 45 gifted children with 45 normal and 45 feebleminded. All were Jewish children, thus eliminating the possible influence of race. The gifted were markedly superior to the normal and the normal to the feebleminded in height and weight. The Almacks (2) reported the same tendency. Cleveland (4) found that a higher percentage of the gifted were of the proper weight for their height; that is, abnormally thin or abnormally obese individuals were less common among the gifted than among the children of average intelligence. Yates (33) called the gifted "physiologically accelerated." Jones (20) found that 79 per cent of her gifted group had reached the weight norm of children a year older than themselves and the same proportion showed a like acceleration in height.

The fact that the gifted are taller and heavier than their average fellows seems to be only a corollary to the general tendency which these physical measurements show to vary positively with intelligence. There is an extensive literature on the

subject, nearly all of which is summed up by Gates (13) and by Stalnaker (24). In general it may be said that the early studies were inconclusive, either because the criteria of intelligence adopted were too crude, or because of faulty statistical treatment of the data. The more modern studies, for example, Baldwin (3), Naccarati and Lowy-Guinzburg (22), Stalnaker (24), Gates (14), Abernethy (1), Englehardt (10), and Woodrow and Lowell (32) are in general agreement in finding a low but positive correlation between intelligence and various physical measurements. There is a slight, though real, tendency for the brighter to be larger and heavier. It is not surprising, therefore, to find that gifted children enjoy for the most part a superior physical equipment.

Turning now to the social characteristics of the superior child, one is pleasantly surprised to find that the gifted are anything but the little prigs which they were commonly supposed to be. Practically all investigators report that if there is any difference between the personalities of the gifted and average children, the differences are all in favor of the superior children. Davis (8), on the strength of a questionnaire which she circulated among the teachers of gifted children, found that these children enjoyed a universal popularity on the school grounds. Root (23) reported very superior character traits for the gifted. Coy (6), who experimented with a class of superior children and a control class of average children, failed to find any signs of queerness in the former. Hollingworth (16) finds an "insatiable curiosity" to be the outstanding personality trait in the children she studied. Yates (33) found the gifted more interested in school. Johnson (19) collected the composite judgment of 33 teachers who together were teaching 900 gifted children in special classes in St. Paul, and found that these children were more imaginative, more courteous, more cooperative, more talkative, more willing to take suggestions, had a keener sense of humor and were not more domineering, nor self-willed nor egotistic. Jones (20) wrote of her group, "In personality they are marked by a balanced superiority-inferiority orientation, by a tendency toward the extravert, rather than the introvert type, by a superior social orientation shown in an intelligent reaction to organized authority, and by a wide range of interests."

Strict scientific accuracy might find fault with these results on the score of being too subjective. One may suspect the teacher of a special class of some bias in favor of her pupils. All the writers mentioned above were basing their conclusions on their own judgments. How much reliance can be placed on them? It has remained for Terman (26) to take up the whole question from an objective standpoint. He accomplished this result by using the new technique for measuring non-intellectual traits. Without going too far afield from the present subject, it may be stated that a number of investigators, Voelker, Pressey, Cady, Raubenheimer, and others had been working with various forms of tests, superficially resembling intelligence tests in their method of administration but which could measure with fairly good reliability certain non-mental traits.

By using tests of this sort Terman was able to compare certain personality traits of the gifted with the traits of the control without introducing the subjective element. His results are interesting and uniformly in favor of the gifted. Thus he found a slight superiority for the gifted in the Raubenheimer-Ruch overstatement test. In two tests for questionable interests and a test for social attitudes 74 per cent, 81 per cent, and 90 per cent, respectively, of the gifted group scored above the median of the control group. The former were "far superior" in the Voelker-Cady conscientiousness test, and 75 per cent of the gifted were above the median of the control in the Woodworth-Cady test of emotional stability. Other tests demonstrated that the gifted were more mature in their play interests, excelled greatly in all sorts of play information, were slightly less interested in active games and somewhat more in intellectual games, and that there was no significant tendency for the gifted boys to be less masculine in their interests than were their normal fellows.

The gifted have their characteristic faults, too. According to Stedman (25) and Davis (8), the most important of these are two, egotism and laziness. They agree that the former is not a serious problem. Some teachers do not find it at all. All who do find egotism among the superior children report that it may easily be overcome by a tactful teacher. Not so with laziness! Teachers of special classes find this to be the most serious fault of the superior child. Our present educational methods system-

atically and successfully teach these children to be lazy. They are placed in grades far below their real ability. The lessons assigned present no real problem to their busy minds. They progress from grade to grade without effort or hard study and are praised for doing it. The lessons which call for hard work and mental discipline on the part of their fellows are for them a joke. What wonder, then, if years of this sort of thing result in habits of laziness which are hard to break?

Besides the above studies of special topics regarding the gifted, there are a number of case studies of exceptional children which are extremely valuable for the student who is interested in the personality of the gifted. Stedman's (25) studies are particularly valuable for the educator. Hollingworth, Garrison and Burke (17), and Garrison, Burke and Hollingworth (12) present two reports, at an interval of five years, of a prodigious child who attended Columbia. Dvorak (9), Morton (21), and Furfey (11) give case studies of individual children. Waddle (31) gives a number of typical cases, and Van Alstyne (29) presents interesting results after studying ten gifted children whose school progress was not satisfactory.

To sum up—the gifted child is not a child apart. If one saw him at play in the school yard it would be difficult or impossible to pick him out from among his fellows. He is characterized by no one type of personality, but may exhibit any of the various types which his normal fellows exhibit. He differs enormously from the others in intelligence, but only slightly in other things. The differences which appear between him and the average child in non-intellectual traits are relatively small, are nearly always in favor of the gifted, and do not always appear in individual cases, but stand out only when a large number of the one group are compared with a large number of the other.

BIBLIOGRAPHY

(1) Abernethy, Ethel M.: "Correlations of physical and mental growth." *Jr. Ed. Psychol.*, 16:458–66 and 531–46, 1925.

(2) Almack, J. C., and J. L.: "Superior types in high school." *Educ.*, 42:352–58, 1922.

(3) Baldwin, Bird T.: "The relation between mental and physical growth." *Jr. Ed. Psychol.*, 13:193–203, 1922.

(4) Cleveland, E.: "Some further studies of gifted children." *Jr. Ed. Res.*, 4:195–99, 1921.

(5) Cobb, Margaret V., and Hollingworth, Leta S.: "The regression of siblings of children who test at or above 135 I.Q. (Stanford-Binet)." *Jr. Ed. Psychol.*, 16:1–7, 1925.

(6) Coy, Genevieve Lenore: "The interests, abilities and achievements of a special class for gifted children." New York, Teachers College, Columbia University, 1923. v, 195 pp.

(7) Dashiell, J. F., and Glenn, W. D.: "Q re-examination of a socially composite group with Binet and performance tests." *Jr. Ed. Psychol.*, 16:335–40, 1925.

(8) Davis, Helen: "Personal and social characteristics of gifted children." *23rd Yearb. of the Nat. Soc. for the Study of Educ., Part 1*, 123–44, 1924.

(9) Dvorak, H. Dealey: "The mental tests of a superior child." *Mental Hygiene*, 7:250–57, 1923.

(10) Englehardt, J. L.: "A test for physical efficiency; the correlation between results therefrom and results from tests of mental efficiency." *Jr. Ed. Psychol.*, 15:573–78, 1924.

(11) Furfey, Paul Hanly: "Where gifted children learn." *Cath. Educ. Rev.*, 23:465–72, 1925.

(12) Garrison, Charlotte G.; Burke, Agnes, and Hollingworth, Leta S.: "The psychology of a prodigious child." *Jr. Apl. Psychol.*, 1:101–10, 1917.

(13) Gates, Arthur I., *et al.*: "Educational significance of physical status and of physiological, mental, emotional and social maturity." *Teachers Coll. Rec.*, 25:223–39, 1924.

(14) —— "The nature and educational significance of physical status and of mental, physiological, social and emotional maturity." *Jr. Ed. Psychol.*, 15:329–58, 1924.

(15) Haggerty, M. E., and Nash, Harry B.: "Mental capacity of children and paternal occupation." *Jr. Ed. Psychol.*, 15:559–72, 1924.

(16) Hollingworth, Leta S.: "An introduction to biography for young children who test above 150 I.Q." *Teachers Coll. Rec.*, 26:277–87, 1924.

(17) —— Garrison, Charlotte G., and Burke, Agnes: "Subsequent history of E; five years after the initial report." *Jr. Apl. Psychol.*, 6:205–12, 1922.

(18) —— and Taylor, Grace A.: "Size and strength of children who test above 135 I.Q." *23rd Yearb. of the Nat. Soc. for the Study of Educ., Part 1*, 221–37, 1924.

(19) Johnson, O. J.: "Teachers' judgments of qualities of gifted pupils as related to classroom activities." *Sch. and Soc.*, 17:466–69, 1923.

(20) Jones, Alice M.: "An analytical study of one hundred twenty superior children." *Psychol. Clinic*, 16:19–76, 1925.

(21) Morton, R. L.: "Harold—a second report." *Jr. Ed. Res.*, 11:231–34, 1925.

(22) Naccarati, Sante, and Lewy-Guinzburg, R. L.: "Hormones and intelligence." *Jr. Apl. Psychol.*, 6:221–34, 1922.

(23) Root, William Thomas: *A socio-psychological study of fifty-three supernormal children*. Princeton, Psychological Review Company, 1921. 134 pp.

(24) Stalnaker, Elizabeth M.: "A comparison of certain mental and

physical measurements." *Jr. Comp. Psychol.*, 3:181–239 *and* 431–68, 1923.

(25) Stedman, Lulu M.: *Education of gifted children.* Yonkers, World Book Company, 1924. viii, 192 pp.

(26) Terman, Lewis M.: "Genetic studies of genius, vol. 1; Mental and physical traits of a thousand gifted children." Stanford University, Stanford University Press, 1925. xv, 648 pp.

(27) —— "The measurement of intelligence; an explanation of and a complete guide for the use of the Stanford revision and extension of the Binet-Simon scale." Boston, Houghton Mifflin Company, 1916. xviii, 362 pp.

(28) —— "The physical and mental traits of gifted children." *23rd Yearb. of the Nat. Soc. for the Study of Educ., Part 1,* 155–67, 1924.

(29) Van Alstyne, Dorothy: "A study of ten gifted children whose school progress was unsatisfactory." *Jr. Ed. Res.*, 8:122–35, 1923.

(30) Visher, Stephen S.: "A study of the type of place of birth and of the occupation of father of subjects of sketches in 'who's who in America.'" *Am. Jr. Sociol.*, 30:551–57, 1925.

(31) Waddle, Charles W.: "Case histories of gifted children." *23rd Yearb. of the Nat. Soc. for the Study of Educ., Part 1,* 1924.

(32) Woodrow, H., and Lowell, F.: "Some data on anatomic age and its relation to intelligence." *Ped. Sem.*, 29:1–15, 1921.

(33) Yates, Dorothy Hazeltine: "A study of some high school seniors of superior intelligence." Bloomington, Illinois, Public School Publishing Co., 1922. 75 pp.

PAUL HANLY FURFEY.

EDUCATION IN LITHUANIA—II

Revolution followed fast in the wake of the Russo-Japanese War, and all the people of the empire, especially those of oppressed nations, rose up and demanded better living conditions. In 1905, 2,000 representatives of Lithuania attended the National Assembly at Vilna and demanded an autonomous government comprising four districts: Vilna, Kaunas, Gardinas, and Suvalkai. They were not successful in their demands, but none the less they secured modifications in many severe edicts.

The Government Schools

After the formation of the "Duma" (1905) the spread of education was more rapid and general. Schools greater in number and of higher standing were the order of the day, being given much better financial support by the government than they formerly received. In 1906 the government expended on the schools 14,000,000 rubles ($7,000,000) and in 1915, 100,000,000 rubles ($50,000,000). From 1905 to 1915 schools in Russia were more than doubled in number.

	1906	1915
Gymnasia	286	600
Normal schools	72	150
Elementary schools	40,710	(1913) 68,425[28]

Progress in Lithuanian elementary schools was similar to that in other parts of Russia.

In the District of Vilna:	1905	1913
Elementary schools	2,172	5,967
Orthodox pupils	96,931	258,279
Catholic pupils	29,807	94,134
Total pupils	126,738	352,413

These statistics are taken from the Russian Ministry of Education (1905–1913).[29] It is seen from them that Orthodox pupils

[28] Vseocshchyi otchet M. N. P. (184–186), 1906, 1915 (Rus.).
[29] *Ibid.*, 1905, 1913.

in the elementary schools outnumbered Catholics by about three to one, but we know also that in Lithuania the Vilna district was about 75 per cent Catholic and 10 per cent Orthodox. It is evident, then, that these elementary schools were organized and located where they would best accommodate Orthodox pupils.

Schools of higher learning made progress everywhere but in Lithuania. In 1914 there were only eleven gymnasia in the Vilna district, while in Moscow there were 91, Kiev 65, Odessa 49. In all Russia there were 441 at that time.[30]

Private Schools

From 1905, culture, general education and national aspirations saw further growth. Following the government concession to open private schools, Lithuanians organized many societies for the spread of education. In 1905 there was organized in Mariampole, "Sviesa" (Light), and in 1906 "Ziburys" (Illumination), which had seven elementary schools, one gymnasia and one agricultural school. In 1906 there was organized at Kaunas "Saule" (Sun), which society built in 1913 at Kaunas, from free-will offerings, a large normal school for the education of Catholic teachers. This "Saule" had 63 divisions in different parts of the country. In 1913 the educational organization "Rytas" (Morning) was established at Vilna and built one gymnasium in Vilna and had twenty extensions throughout the country. There was something prophetic in the organizing of the societies of light, the sun, illumination, morning, in the principal cities of Lithuania, for their influence soon became widespread.

Under them light was carried to the far places; people awoke to better things, minds were illumined and all saw the splendor of truth. The government placed many obstacles in the way of these societies. They were required to obtain government permission to open each school, and such permission was very often withheld. Those allowed to be opened were under strict government supervision, and their graduates were forced to take an examination from a government board before a diploma was granted. The religious and monastic schools that had been confiscated between 1832 and 1864 were not returned, and the prohibition abolishing them was never revoked.

[30] Russkaja Shkola (37-53), by Malinovaki (Rus.).

This Spirit of Russia towards the Lithuanians never died until the occupation of Lithuania by Germany.[21]

III. EDUCATION IN INDEPENDENT LITHUANIA

Lithuania lost her independence during the last half of the sixteenth century. For 216 years (1569–1795) the country was federated with Poland; for 120 years (1795–1915) it was under Russian control, and, finally, for a period of some three years (1915–1919) was subject to German rule. In 1918 the Lithuanians declared their independence, under circumstances, however, rendered most unpropitious by prevailing economic conditions. The period of the great European War, and particularly that of the German military occupation, were almost ruinous to the country, and the period following the cessation of hostilities was one in which the newer and weaker nations of Europe were faced with difficulties that seriously threatened their very existence. Lithuania was, moreover, confronted with grave problems of her own in the year of her new-found independence. She was in 1919 at war with Bolshevist Russia as well as with Bermondia, and again in 1920 she suffered invasion at the hands of Poland, as a result of which she lost her capital, Vilna, and almost a third of her territory, which still remain in Poland's possession. The detrimental effect upon culture and education of this desperate struggle for existence, in the face of continued persecution by stronger nations, was very marked.

Notwithstanding all this, the signs of the dawning of a brighter educational era were unmistakable. Centuries of suppression had failed to blunt the national ambition for cultural development, and the flame which oppression had but dimmed was fanned by the breath of freedom into new life which found expression in immediate and fruitful action.

The systematic development and consistent growth of education in Lithuania in the years following its independence are shown by the statistics below:[22]

	1920	*1921*	*1922*
Elementary schools	1,173	1,425	1,880
Secondary schools	29	41	73
Colleges	16	23	26

[21] (*a*) Desimt metu (1905–1915), Tautinio kultutinio Darbo Lietuvoj, by Salcius (Lit.). (*b*) Litauen (159–170), by Ehret (Germ.).

[22] Svietimo Darbas N1–2, Kaunas, 1922 (Lit.).

In 1922 popular democratic government was established in the country and, in the Constitution which was formally adopted that year, education was given that consideration which its importance warranted, as will be seen by the following extract:

IX. EDUCATION

Section 78.—The education of their children shall constitute the supreme right and natural duty of the parents.

Section 79.—Schools may be established by the state, local self-governments, public organizations, and individuals. All schools shall be under state supervision in the manner prescribed by law.

Section 80.—Religious education in schools shall be compulsory, with the exception of schools established for children whose parents do not belong to any religious organization. Religion shall be taught in accordance with the requirements of those religious organization to which the students belong.

Section 81.—Primary education shall be compulsory. The manner and time of establishment of compulsory primary education shall be fixed by law.

Primary education in schools maintained by the state and local self-governments shall be free.

Section 82.—Private religious schools, provided they comply with the minimum of the program fixed by law, shall receive from the State Treasury for the purposes of education that part of the budget appropriation which shall correspond to the number of Lithuanian citizens and students belonging to such religion which shall conduct such schools and education.[33]

In pursuance of these constitutional provisions, the government in November, 1922, formulated and put into effect regulations governing the administration of education, which were as follows:

1. All elementary schools shall be under the control of the Ministry of Education.

2. Elementary schools may be organized and maintained by the Minister of Education, by local self-governments, by religious and other organizations, and by Lithuanian citizens in their private capacities.

[33] Extract from the Constitution of Lithuania.

3. All elementary schools shall be conducted according to the provisions of the Constitution and in accordance with the religious persuasions of the parents.

4. The term of the elementary course shall be four years.

5. For every five hundred of the population there shall be one elementary school. In cases of necessity it shall be permissible to establish elementary schools on a basis of less than five hundred of the population.

6. There shall be one teacher for every thirty-two to sixty pupils.

7. All boys and girls between the ages of 7 and 14 years shall attend the elementary schools. Under certain circumstances, older children may be accepted.

8. Elementary evening schools shall be arranged for adults.

9. With the consent of the Ministry of Education, the term of the elementary course may be extended to a longer period than four years.

10. Religious instruction in schools shall be given only by those who have the approval of their religious superiors, and such persons must have not less than a secondary education.

11. The duration of the school year shall be determined by the Ministry of Education.[34]

12. Diplomas shall be awarded those who have completed the four years' elementary course.[35]

Schools for secondary and higher education are organized on the same principal as that governing the elementary schools.

Parents' committees are organized in connection with all the schools, except the universities, whose purpose it is to assist the work of the schools in various material respects. One of the important functions of these committees is the choosing of competent delegates to discuss with teachers' committees questions, of a moral and disciplinary nature only, affecting the pupils.[36]

That education in Lithuania has maintained its steady growth, both quantitative and qualitative, under the new regime is clearly shown by the following official statistics taken from the report of the Ministry of Education of January, 1925:

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[34] With the exception of 2½ months of summer vacation, 18 days' vacation at Christmas and 14 days at Easter, as well as Sundays and other holidays, all other days of the year are school days.

[35] Vyziausybes Zinios, N117, 1922 (Lit.).

[36] "Lietuvos istatai," by A. Merkys, Kaunas, 1922 (Lit.).

(*Note.*—These figures do not include the territory occupied by Poland in 1920, nor the District of Klaipeda (Memel), which in 1922 was returned to Lithuania from Germany under the provisions of the Treaty of Versailles.)

ELEMENTARY EDUCATION

Schools	2,189
Teachers	2,891

Teachers According to Religions

Catholic	2,508
Jewish	223
Protestant	107
Orthodox	38
All others	15
Total	2,891

Pupil Enrollment

Boys	69,856
Girls	52,736
Total	122,592

According to Religious Denominations

Catholic	106,054
Jewish	10,139
Protestant	4,320
Orthodox	1,302
All others	777

Curriculum

(1) Religion, (2) Lithuanian Language, (3) Arithmetic, (4) Nature Study, (5) Geography, (6) History of Lithuania, (7) Civics, (8) Graphics, (9) Handwork, (10) Hygiene, (11) Gymnastics and Play, (12) Singing and Music (Religious and Secular).[27]

SECONDARY EDUCATION

Government schools	53
Catholic associations ("Saule," "Ziburys," and religious orders)	11
Jewish	10
Protestant	1
Total	75

Enrollment in These Schools

Boys	5,634
Girls	3,708
Total	9,342

According to Religions

Catholic	7,858
Jewish	1,110
Protestant	299
All others	75

[27] Lietuvos istatai (p. 540), 39 Merkys Kaunas, 1922 (Lit.).

Curriculum of Secondary Schools with Number of Hours per Week

	1st year	2nd year	3rd year	4th year
Religion	2	2	2	2
Lithuanian Language	6	5	4	3
German	4	4	4	3
Latin, French, Russian, English	Students are obliged to take not less than one of these languages.			
Arithmetic	5	3	2	—
Algebra	—	2	2	3
Geometry	2	2	2	2
Physics, Chemistry	—	—	2	2
Nature	2	2	2	2
History	3	2	2	2
Geography	3	3	2	2
Graphics	2	1	—	—
Painting	2	2	2	—
Gymnastics	1	1	1	1
Handwork	2	2	2	2
Cooperation	—	2	2	3
Music	2	2	2	2
Civics	—	2	2	2
Total hours per week	36–38	36–39	34–37	31–33

HIGHER EDUCATION

Government Colleges	10
Catholic Associations	13
Jewish	11
Protestant	1
Russian	2
All others	3
Total	40

Enrollment in These Schools		*According to Religions*	
Boys	5,248	Catholic	5,123
Girls	3,993	Jewish	3,332
		Protestant	281
Total	9,241	Orthodox	258
		All others	247

In addition to the secondary school subjects, which are developed along broader lines, the college curriculum includes Psychology, Logic, Cosmography, Law, Trigonometry and higher Mathematics. The college course extends over a term of from seven to eight years.

NORMAL SCHOOLS AND SPECIAL TEACHERS' COURSES

Government schools	10
Catholic associations	9
Jewish	3
Teachers' associations	1
Total	23

Enrollment in These Schools		*According to Religions*	
Men	815	Catholic	1,474
Women	683	Jewish	91
		Protestant	25
Total	1,498	Orthodox	8

Curriculum of the Normal School with Hours per Week

	1st year	*2nd year*	*3rd year*	*4th year*
Religion	2	2	2	2
Lithuanian	5	4	3	4
German	5	5	5	4
Mathematics	4	4	4	4
Physics	2	2	2	3
Chemistry	—	—	1	2
Nature	2	2	2	—
Geography	3	2	—	—
Cosmography	—	—	2	2
History	3	2	2	2
Psychology	—	2	3	3
Painting	2	2	2	1
Graphics	2	1	—	—
Practice	—	2	2	3
Singing and music	3	3	3	2
Physical exercise	2	2	2	2
Handwork	3	3	3	3
Total	38	38	38	37

SUMMARY OF SECONDARY SCHOOLS AND COLLEGES

Government schools	73
Catholic associations	32
Jewish schools	24
Protestant schools	2
Russian schools	2
All others	3
Total	136

Enrollment in These Schools		*According to Religions*	
Boys	15,016	Catholic	19,623
Girls	10,852	Jewish	4,704
		Protestant	895
Total	25,868	Orthodox	392
		All others[88]	254

[88] Svietimo Darbas N1-2, Kaunas, 1922; *ibid.*, N11-12, Kaunas, 1923; *ibid.*, N1, Kaunas, 1925.

The above statistics do not include agricultural, technical and other professional schools.

UNIVERSITIES

University of Vilna

This university, which in 1832 was abolished by the Russian Government, as previously referred to, was reestablished on January 1, 1919. In this year the following faculties were put into operation: Theology, Psychology, Law, Medicine.[39]

University of Kaunas

On January 27, 1920, this institution was established and courses in higher education were given, and on February 16, 1922, it was reorganized as a university. The University of Kaunas now has the following faculties: Theology, Philosophy, Social and Humane Sciences, Law, Mathematics and Natural Sciences, Medicine, and Technical Sciences (Engineering). The student enrollment in this university this year was about 3,000. The number of professors, extra-professors, docents, acting docents and lecturers totaled 110.[40]

Both these universities were established and are maintained by the state, but the privilege has been reserved to Catholic ecclesiastical authorities to approve all appointments to the Faculties of Theology and Philosophy. Only graduates of colleges, seminaries, normal schools and other institutions of higher learning are admitted as students.

The elementary and secondary schools, colleges and universities have one continuous system of education; that is, graduation from a lower automatically admits the student to a higher school. The Lithuanian schools are, with few exceptions, coeducational, and their methods and organization are, in greater or lesser degree, similar to the German system.

With the recovery of her independence, Lithuania witnessed the springing up of a new ambition on the part of her youth for greater educational advancement. The desire for cultural expansion was in evidence everywhere, and students began to look to

[39] Lietudas istatai (531–538) Merkys, Kaunas, 1922.
[40] Lietudas Universi tetas, Kaunas, 1923.

other nations wherein greater educational opportunities might be found and new ideas gathered which would, in their assiduous application, assist Lithuania's forward progress in education. So it is that today no less than one thousand Lithuanian students are to be found in universities of Germany, France, United States, Italy, Switzerland, Austria, Belgium, and England.

Realizing that the surest guarantee of the continued independence of their country depends in great measure upon the enlightenment of the people, young Lithuanians are striving with all the might that is theirs to rear such a bulwark as will endure for all time and against all attacks. For them, as for their ancestors of centuries ago, there is a fullness of meaning in the words of the national anthem: "Light and Truth are our steps to progress."

JOSEPH KONCEVICIUS.

CLASSICAL SECTION

This section aims first of all to act as a bureau of information for teachers of the Classics, particularly those of Catholic schools. Questions sent to me will be answered in these columns or by personal letter; or they will be turned over to persons fully qualified to give them proper consideration. It aims also to keep its readers informed of the most important movements and events in the world of the Classics, especially such as bear on the teaching of Latin and Greek in secondary schools.

Notes on Ecclesiastical Latin (Continued)

V. The Use of Moods (Continued)

3. *Infinitive (continued).*

f. The Nominative Case and the Infinitive.

In classical prose the infinitive was employed with the passive of certain verbs used personally. This was true of all verbs of "saying" and "thinking," but even with such verbs this usage had certain restrictions. Thus with *fero* this phenomenon appears only after the forms *fertur* and *feruntur*. Furthermore, except for *videor*, when the passive form of the verb involves the perfect participle, the impersonal rather than the personal construction is employed. Thus a Roman of the classical period would not say, *"Traditus est Homerus caecus fuisse,"* but *"Traditum est Homerum caecum fuisse.*

Writers of the late periods of Latinity leaned greatly toward the personal construction, and spread its use to any verb and to any person, as they saw fit. Note the following examples:

Cyprian, 655, 9: *hostis nobis inminere praenuntiatur.*

Arnobius, 1, 48: *Christus enim scitur . . . aures aperuisse . . ., exturbasse . . . caecitates, orationem dedisse mutis, articulorum vincula relaxasse, ambulatum dedisse contractis . . . .*

4. *Participle.*

(a) The Participle, Present or Past, Used Substantively.

As a rule, writers of the "Golden Age" rarely employed the singular of adjectives and participles as substantives. They did frequently use the nominative plural of neuter adjectives and participles as nouns. From Livy on, however, there is growing

tendency to use all the plural forms of the participles as nouns, and eventually all forms of the singular. This widespread use of the participle especially replaced the relative clause, often corresponding to the common Greek construction of the participle and the definite article. Thus:

Cyprian 282, 26: *quaerentibus* (τοις ζητουσι) *regnum . . . Dei promittit omnia adponi.*

Anobius 1, 8: *subiectis adforunt variorum discriminum necessitates.*

Arnobius 1, 46: *tacitorum in cordibus perirdebat.*

(b) The Masculine of the Future Participle Used Absolutely.

In strictly classical Latin the participle in—*urus* was rarely used without some form of the verb *sum;* i.e., except in the first periphrastic conjugation. In Imperial times, from Livy on, and especially in Tacitus, this participle was treated with more freedom. Sometimes it replaced an entire coordinate or subordinate clause. Often it was used to denote destination or as the equivalent of the ordinary future tense. Thus:

cum carnificis unci aliique innumeri cruciatus quemadmodum diximus impendeant crediturus.

si per circi medium pergat nocens aliquis meritorum poenas et supplicia redditurus.

(c) Special Compound Tenses.

In Ecclesiastical Latin the present participle is often used with forms of *sum* in a kind of periphrastic conjugation. This usage is very old in vulgar Latin, appearing in Plautus, Terence, and Cato. E.g., *ut tu sis sciens = ut tu scias; sotens sum = soleo.* Its spread in Ecclesiastical Latin is due largely to the influence of the Bible, where this usage is very frequent. Considerations of style, especially an effort to procure clausulae, also exerted some influence. Note the following examples:

et quis ita est hominum deus prorsus quid sit ignorans.

utilitas haec nostra est et commodi nostri rationem spectans.

Very early in the history of the language we find the verb *habere* in such expressions as *habere aliquid paratum.* Examples appear in Plautus and thereafter. This expression has its value when the writers wishes to note strongly that at a certain time he is (was or shall be) in possession of a certain completed action. Thus, *sic habuisti statutum cum animo ac deliberatum* instead of

statui . . . ac deliberavi; and *sic igitur instructus veniet ad causas, quarum habebit genera primum ipsa cognita (=cognoscet).* But very often in the vulgar Latin of all periods, and in Ecclesiastical Latin, the verb *habere* with the past participle appears to be equivalent in force to our own perfect tense. Thus:

quid si materiae faex ista . . . hanc, habet sibi legem datem, ut expiret nocentissimos habitus . . . .

aliquos numeros cottidianis habet exusibus notos.

qui (Christus) monstravit . . . nos . . . nihil comprehensum habere, nihil scire . . . .

A news dispatch from Culver City, California, home of moving pictures, states that an enormous "set" representing the Colosseum at Rome is being built on a 60-acre lot there at a cost of $300,000. The moving-picture actors who will appear in the picture will number 10,000—if we may believe the inspired publicity agents.

Prof. Charles R. Morey, in charge of the School of Classical Studies in Rome, reports an enrollment of 47 students, 11 of whom are visitors, and 9 other holders of fellowships from other institutions. The usual program is being followed.

THE AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS

The dedication of the Gennadius Library building, erected with funds given by the Carnegie Corporation, and the formal opening for the use of scholars of all nations of the library and collections, the gift to the School of Dr. Joannes Gennadius and Madame Gennadius, will take place in Athens on April 23, 1926.

The participants in the exercises, which will be academic in character, will be representatives of the Trustees and Managing Committee of the school, the Carnegie Corporation, the Government of Greece, and delegates from the institutions in America which contribute to the support of the school; also delegates from universities, learned bodies and museums of the United States and of Europe, and such friends and patrons of the School as may be able to attend.

For further information, including ways and means of travel,

consult Prof. Edward Capps, chairman of the Managing Committee of the school, Princeton, N. J.

The Summer Session of the American School of Classical Studies at Athens begins officially at Rome Monday morning, July 5, and continues until embarkation at Piraeus, August 19, a period of nearly seven weeks.

These Summer Sessions are planned for teachers and graduate students of the Classics, History, Archaeology, and Art who cannot devote an entire year to study in Greece but who may spend a summer vacation in such studies.

The work will be conducted in 1926 as in 1925 by Prof. Walter Miller, Dean of the Graduate School of the University of Missouri, who was one of the earliest members of the school and who has since then in various years directed many groups of students in Greece.

The principal lines of study will be:

1. Greek Architecture, Greek Sculpture, Greek Vase-painting;
2. Greek History and Classical Antiquities;
3. The Topography of Athens, Olympia, Delphi, etc., and the Geography of the Aegean world;
4. Literary Associations with Classical sites.

As it rarely rains in Greece in summer, practically all the lectures will be given at the temples, theaters, stoas, and other monuments. The lectures will thus take the form of demonstrations from material actually in hand.

For further information, address Professor Miller at the school in Athens.

In the January number of *Latin Notes*, Dr. John Gummere discusses the use of translations by high school students of Latin. He says, in part:

"We have, perhaps, all heard someone boast that he 'trotted all through his Latin.' That should be impossible nowadays. Yet the old methods of dealing with offenders are very bad, from a pedagogical standpoint. Threatening, or actually imposing, severe punishment merely keeps the evil in abeyance and not infrequently fills the minds of some pupils with an unholy desire to outwit their teachers."

His solution is not only a wide-awake spirit on the part of the

teacher to detect the use of the "pony," but such a carefully planning and conducting of the course as to make their use no temptation.

Too many teachers, I fear, have accepted the "pony" as an insurmountable evil, and some even suggest or openly permit its use. Nothing is more vicious for the development in our students of some real knowledge and power in Latin.

AN OBJECTIVE DEVICE

"I found that I was assisted greatly in the teaching of the five declensions by the use of the following device. On a large chart of manilla paper in the front of the room I have placed in large letters the bases of the five words, *porta, amicus, miles, exercitus,* and *dies*. Beside these words there is a space reserved where the corresponding endings are placed by the pupils. At the beginning of the period the endings are shuffled and distributed among the members of the class. The object of the game is to dispose of the assigned cards in their correct places on the chart. When 'genitive' is called by the teacher, the pupils holding such cards immediately fasten them to the corresponding base word. I teach adjectives in the same way. By means of frequent drills of this sort and by occasional 'spell-downs' I find that the pupils master their declensions rather easily.—SISTER MARY PATRICK."

I would be very glad to receive similar material from our Catholic teachers for publication in these columns.

The following new works are of special interest:

The Elements of Greek Philosophy from Thales to Aristotle, by R. B. Appleton. Methuen & Co.

A thesis entitled *The Quality of English in Latin Translations,* by Dr. Mazie N. Woodring, Associate in Education at Teachers College, has just been published by the Columbia University Press. Teachers of Latin will read this with interest.

An elaborate list of books classified under important topics, with chapter and page references; designed primarily for use in college courses dealing with Roman life or a general study of civilizations. Prepared by W. B. McDaniel, Professor of Latin at the University of Pennsylvania. Price, 25 cents.

Roma Sacra, by J. J. Donovan. A series of 152 views in colors. London: Jaschke.

Horace and His Art of Enjoyment, by E. H. Haight. New York: Dutton.

Christianity and the Roman Government, by E. G. Hardy. A study in imperial administration. London: Allen & U.

Mythology for Young People, by Jane Black. New York: Scribner.

Greek Culture and the New Testament, by D. A. Hayes. A plea for the study of the Greek Classics and the Greek New Testament. New York: Abingdon Press.

ROY S. DEFERRARI.

AFFILIATED HIGH SCHOOL AND COLLEGE SECTION

REPORT ON CERTIFICATES FOR THE YEAR 1924–25

The following report relative to the certificates issued by the University to the graduates of the affiliated high schools at the close of the scholastic year of 1924–25 will be found both interesting and significant at this time. It will be in many respects an object lesson, which will show the relation between the attainment of the General Certificate or Diploma and the observance of the regulations as set forth in the syllabus on Affiliation. In fact it is a concrete illustration of the application of regulations numbers eight and nine, page four of the Syllabus.

In May, 1925, the total number of candidates for certificates were:

(*a*) For the General Certificate.....	964
(*b*) For the Special Certificate.....	608
Total	1,572

Of the applicants for the General Certificate 768 were successful. The following is a list of the causes why the remaining 196 failed to receive the certificate for which they had worked. The number affected by these causes is indicated in each case.

(*a*) Forty-two failed because of regulation No. 2, page 2 of the Syllabus I. E. did not offer the required 15 units.
(*b*) Fifty failed in a required subject.
(*c*) Thirteen failed to observe regulation No. 2, page 47 of the Syllabus.
(*d*) Six failed to offer two units in one of the approved languages, other than English.
(*e*) Sixteen failed to offer three units in one of the approved subjects, in addition to the three required units in English.
(*f*) Ten failed to offer a unit in Science.
(*g*) Thirteen failed to offer the required unit in History I as stated on page twenty-seven of the Syllabus.
(*h*) Twenty-two failed to offer the number of required units in Mathematics.
(*i*) Twenty-four failed because of regulation No. 7, page 47 of the Syllabus.

A close study of these 196 cases will show that at least 80 of these (those listed under the headings from (*c*) to (*h*) could

have been prevented if a more careful observance of the regulations had been maintained by those responsible for the formation and administration of the curriculum at each of the several affiliated high schools.

In June, 1925, 780 Special Certificates were issued. Of this number 608 had been applied for, principally by those schools which have been affiliated during one of the past three years and whose graduates therefore were not able to offer the number of units requisite for a general certificate. To this number must be added 172 of the cases discussed in the previous paragraph, i.e., those candidates who applied but failed to secure the General Certificate. A Special Certificate was issued to them. Of the remaining twenty-four, nineteen have been denied certificates and five are still under consideration by the Committee on Affiliation.

The above figures indicate that about 50 per cent of the graduates for the school year 1924–25 received General Certificates and that about 80 per cent of those who applied for it were successful. The obvious conclusion to be drawn from these figures is that the efforts of the pupils will be aided if a closer adherence be given to the regulations governing the recognition of high school credits by the Catholic University and its affiliated colleges. The Committee on Affiliation would accordingly suggest that a more prudential and firmer insistence be given to the recommendation made on page 3 of the Syllabus. It would tend to lessen the evil effects arising from failure and disappointment and strengthen the benefits which the University, by the system of affiliation, has always endeavored to extend to both the teachers and pupils of the Catholic high schools of our country.

NEWS ITEMS

The pupils of St. Mary's School, Okarche, Oklahoma, are rejoicing over the generous donation of reference books to their school library. This school also reports that a new science laboratory, equipped with apparatus of the latest type, has been installed. Preparations are being made for the formation of a school museum. This school will be glad to exchange any duplicates that it may acquire with any of the other affiliated high schools interested in similar projects.

Incarnate Word College of San Antonio, Texas, reports that it has been admitted to membership in the Southern Association

of Colleges, the Southern Association of Women's Colleges, the American Association of Colleges, and the American Council on Education.

The pupils of St. Cecilia's Academy were honored recently by a visit from Miss Will Allen Drumgoole, the well-known Tennessee poetess and short-story writer. Miss Drumgoole gave a lecture on "The Boyhood Life of the Tennessee Hero, General Jackson." A special program, commemorative of Robert E. Lee, the Hero of our Southland, was held on January 19. Rt. Rev. Bishop Smith of Nashville, on February 11, presided at the ceremony of reception of two of the alumnae of St. Cecilia's into the Dominican Community. The ceremony took place in the Academy Chapel.

On February 5, Rt. Rev. Bishop Shahan, Rector of The Catholic University, addressed the pupils and teachers of St. Catherine's Normal Institute of Baltimore, Md. The Society of the Children of Mary of this Institution are now making preparations for their second annual pilgrimage to the National Shrine of the Immaculate Conception at Washington, D. C.

Providence Hall, the latest of the group of buildings of Our Lady of the Lake College, San Antonio, Texas, was recently dedicated by the Rt. Rev. Bishop Drossaerte. The Bishop addressed the students on this occasion, taking, as his theme, "The Place and Influence of the Catholic College Woman in Social Life." This new hall is an imposing five-story structure containing two large wings, one of which will be used as a science hall, the other as a residence hall for college students. The science hall contains ten large classrooms, besides laboratories for physics, chemistry, biology, bacteriology and home economics. In this section of the building is also located the art studio. The residence hall contains suites of student rooms, with all modern conveniences including social rooms and an assembly hall, which will accommodate over five hundred. The Very Rev. H. A. Constantineau, O.M.I., the representative of Our Lady of the Lake College, addressed the members of the Southern Association of Colleges at its annual session recently held at Charleston, S. C. Dr. H. J. Ettlinger of the Texas University, under the auspices of the Moye Scholarship Society, gave a lecture on Louis Pasteur, His Life and Work.

The following plan for correlating the work of the classroom with extra-mural activities of the students was sent in from

St. Cecilia's Academy of Washington, D. C. Papers prepared for the meetings of the School Unit of the Catholic Student's Mission Crusade are studied as to their form and language in the English classes and as to their content in the religion classes. The pupils of these classes also report on and discuss articles from the Mission and other Catholic magazines.

Blessed Sacrament Academy of Birmingham, Alabama, reports that the school library has recently been enriched by the addition of a hundred new books, mostly reference volumes. New slate blackboards have been installed in all the classrooms of the high school department. The pupils of the science classes of this institution recently gave a play in order to purchase additional equipment for the biology laboratory. Their endeavors proved a great success. In addition to this, by means of a second performance they were able to present to the school a splendid mimeograph and a check of $100 to the building fund of the new parish church.

A rather clever plan for interesting the pupils of the eighth grade in the value of a Catholic high school education has been devised by the pupils at St. Mary's Academy of Milwaukee, Wisconsin. Each Friday afternoon the pupils of the eighth grade of the several city schools are the invited guests of the pupils of the academy. The programs are of a literary nature. The scheme has proved very successful. A Publicity Committee, made up of pupils from the several English classes of the academy, has been formed for the purpose of sending brief news items of the school's activities to the students' home-town papers and THE CATHOLIC EDUCATIONAL REVIEW. This is an example all our affiliated high schools should follow. Among the lectures recently given at St. Mary's Academy were the following: The Catholic School and Religious Vocations, by the Very Rev. Joseph Barbian, Superintendent of the Catholic Schools of the Archdiocese of Milwaukee; Loyalty and Patriotism, by the Rev. N. Brust of St. Francis Seminary; Athletics and Education, by the Rev. J. O'Boyle of the Pio Nono High School of Milwaukee; The Origins of Modern Education, by the Rev. Father Garesche, S.J.; and Charity at Home and Abroad, by the Rev. George Regenfuss. Modern Law and the Ten Commandments was a timely topic discussed by Mr. J. Scanlan of Wilwaukee with the students of this institution at one of their Friday afternoon programs.

L. L. MCVAY.

EDUCATIONAL NOTES

THE CURTIS-REED EDUCATION BILL

A joint subcommittee of the Senate and House Committees on Education held hearings on the Curtis-Reed Education bill creating a Federal Department of Education, beginning February 24.

The members are: Senate—Phipps of Colorado, chairman; Couzens of Michigan, Ferris of Michigan, Bingham of Connecticut and Copeland of New York; House—Reed of New York, chairman; Robison of Kentucky, Mrs. Kahn of California, Lowrey of Mississippi, and Black of New York.

The hearing was timed for the meeting of the Superintendents' section of the National Education Association, which is pushing the Curtis-Reed bill energetically. Hence a strong representation from that body was present to urge its approval.

Fundamental issues underlying the controversy over the proposal to extend the jurisdiction of the Federal Government in matters of education were laid bare by J. Gresham Machen, of the Princeton Theological Seminary, in an address delivered at the annual convention of the Sentinels of the Republic held at the capital last week.

The project for establishing a federal department of education was directly opposed by the speaker not merely for practical reasons but because it is the efflorescence of a tendency which he characterized as sinister and violates fundamental principles of political freedom.

"I want," he said, "to see this sinister proposal defeated. I want to see something even more far-reaching than that. I want to see this whole tendency defeated.

"I want to see the schools of one state prevented from being monopolistic because they face competition of other states; I want to see the schools of every state kept healthy by the absolutely free competition of private schools and church schools. I want to see the function of all public schools limited rather than enlarged.

"I want to see the responsibility for the moral instruction of children placed exactly where it belongs—in the hands of the individual parent. In other words, I want to see a return from

the present materialistic paternalism to that liberty which has made our country great."

HONOR TO DR. HYVERNAT

Among the recent promotions to the Legion of Honor is one of much interest to linguists on both sides of the Atlantic. It is that of the Very Rev. Dr. Henri Hyvernat, a noted French scholar, who is professor of Biblical archeology and Semitic languages at the Catholic university. Dr. Hyvernat is a native of the department of the Loire, France. He was educated in France and Italy, and before coming to this country was professor of Assyriology and Egyptology at the schools of St. Appolinare in Rome. He was appointed professor of Semitic and Egyptian languages at the Catholic University in 1889, and is one of the few surviving members of the original faculty of the university.

On account of the unfamiliar character of the branch of science which he professes, Dr. Hyvernat is not widely known to the general public, but in the world of science he is universally known as one of the greatest scholars of the present age, and has been highly honored by many universities in this country, England, Italy, Germany and France. His services to J. P. Morgan, who was recently considering the purchase of a rare collection of Coptic manuscripts, were invaluable. It was left to Dr. Hyvernat to establish their authenticity, which he did after many months of tedious and minute investigation.

NOTES ON CURRENT PERIODICAL LITERATURE

Principles of Education

"Morals and the School." W. M. Kern, EDUCATIONAL REVIEW, January, 1926. The writer discusses the wide-spread concern about the low state of morality among the young people of the present day, discounts some of the exaggerated statements made in this regard, traces the causes of conditions that actually do exist, and suggests what the school may do to remedy the situation. A decidedly interesting and suggestive article.

"Fitting the Unfit." Isaac Doughton, EDUCATIONAL REVIEW, January, 1926. A plea for the introduction into education of the principles that have worked out satisfactorily in medicine, industry, criminology and the treatment of the mentally defective. The basic law of education should be, not the survival of

the fittest and the elimination of the unfit, but *the fitting of the unfit.*

"The Output of the Public School." Frederic S. Pope, EDUCATIONAL REVIEW, January, 1926. A banker's opinion of what the school should give the pupil. Contains some good suggestions as to methods of developing qualities that are essential both to good citizenship and to good business.

"The Recent Progress and Problems of Vocational Guidance." John M. Brewer, *School and Society,* January 16, 1926.

"Changing Conceptions of Vocational Education." Robert J. Leonard, *School and Society,* February 6, 1926. Two interesting articles dealing with a live subject. The former, after calling attention to the difficulties in the way of vocational guidance, lays downs several principles that will prove useful in their solution. The latter discusses the program of vocational education from the standpoint of the past, the present and the future and characterizes the periods as those of "copying," of "creating" and of "conserving."

College and University

"Sources of College Publicity." John H. Butler, *School and Society,* January 30, 1926. The most valuable sources of publicity, according to Mr. Butler, are the student body and the faculty. Their achievements, however small they may appear to themselves or to sophisticated critics, should be made known to the public. Newspapers print what people want to read and people interested in a college want to read of what is being done there. The publicity program should be limited to worth-while things but even trivial happenings may have a publicity value if printed in the right place.

"The Problem of Making a College Catalog." Carter V. Good, *School and Society,* January 30, 1926. A detailed description of the revision of a catalog as carried out at Miami University. The article contains some excellent suggestions for the elimination of useless matter and the proper arrangement of that which should be retained.

"Predicting Success in College at the Time of Entrance." J. B. Johnston, *School and Society,* January 16, 1926. A further report on the use of a combined rating scale based on high-school records and tests given freshmen at entrance.

Educational Psychology and Educational Tests

Improving Comprehension Ability in Silent Reading. G. H. Alderman, *Journal of Educational Research,* xiii, January, 1926, pp. 11–21. Drill in Vocabulary, Organization and Retention exercises is studied to determine its effect upon comprehension ability in silent reading.

Diagnosis and Remedial Treatment of Poor Spellers. P. A. Witty, *Journal of Educational Research,* xiii, January, 1926, pp. 39–44. Spelling disability is overcome by the identification of specific under-learned or incorrect habits.

A Plea for a Standard Definition of the Standard Deviation. W. C. Eells, *Journal of Educational Research,* xiii, January, 1926, pp. 45–52. An outline of the advantages of defining the standard deviation exclusively in terms of the arithmetical mean.

Psychological Aspects of the Pre-School Child. S. I. Franz, *Childhood Education,* ii, February, 1926, pp. 277–283. The importance of proper emotional as well as intellectual training in the first few years of life is stressed.

In Honor of Edward Lee Thorndike. Teachers College Record, xxvii, February, 1926. This entire number is devoted to personal appreciations of Thorndike, an annotated, chronological bibliography of his works (1898–1925) and sketches by former students of his contributions to Psychology and Education.

On the Improvement in Intelligence Scores from Thirteen to Nineteen. E. L. Thorndike, *Journal of Educational Psychology,* xvii, February, 1926, pp. 73–76. Evidence from successive testings is presented to demonstrate that the ability to improve one's score in a measure of intelligence improves beyond 14 or 16 and, at least in the cases of those who are subject to intellectual education, beyond 18.

A Percentage Equivalent for the Coefficient of Correlation. P. H. Nygaard, *Journal of Educational Psychology,* February, 1926, xvii, pp. 86–92. A conversion formula and table is presented for giving a clearer idea of the amount of relationship indicated by a correlation coefficient.

Summary of Reading Investigations (July 1, 1924, to June 30, 1925), *I.* W. S. Gray, *Elementary School Journal,* xxvi, February, 1926, pp 449–459. An annotated bibliography of the scientific investigations of reading since the publication of the author's previous summary.

The Intelligence Quotient as a Prognosis of Success in Physics. A. W. Hurd, *The School Review,* xxxiv, February, 1926, pp. 123–128. A study of 58 third-year high school students to determine the relation between the I. Q. and success in physics.

Habituation and the Genesis of Interests. C. F. Arrowood, *Peabody Journal of Education,* iii, January, 1926, pp. 190–197. Published researches in consonance and melody furnish illustrations of the effect of habituation upon the genesis of interests and of the possibility of the control of interests through the operation of intelligence.

Predicting Success in College at the Time of Entrance. J. B. Johnston, *School and Society,* xxxiii, January 16, 1926, pp 82–88. A comparison of predicted success and actual success through the entire college course.

Some Preliminary Results on the Nature of Developmental Age. P. H. Furfey, *School and Society,* xxiii, February 6, 1926, pp. 183–184. Developmental age is defined and the beginning of its quantitative measurement is reported.

The Teachers Journal and Abstract (Vol. 1, No. 1, January, 1926), is published by the Colorado State Teachers College. About one-half of each issue is to be devoted to classified abstracts of articles in the educational magazines of the previous month.

Historical French Reader, by Paul Studer and E. G. Waters. New York: Oxford University Press, American Branch.

This is not a book which can be used in any French class, in high school or college. Its aim, to quote the author's words, is to "supply material suitable for instruction in historical grammar." At the same time, it is intended for philological studies, and it may be used with the greatest profit in linguistics, as it calls the reader's attention on the fact that . . . "the roots of French and English languages and literatures plunge into a common soil and both have assimilated the same elements."

As a whole, the Historical French Reader is composed of selections from Gallo-Roman, Frankish and French writers, from the fourth to the fifteenth centuries. It is divided in five sections, and ends with a glossary.

The first section deals with the texts in vulgar Latin, or transitory Latin, the second with the texts of Carolingian times (Strasbourg Oaths, Sequence of St. Eulalia, etc.). The third section gives us good examples of French language (which the authors call standard French, a qualification which could be contested in some cases), from "La Chanson de Roland" to the end of the fourteenth century. In the fourth, we have texts in old French dialects, and this section is particularly interesting for the scholar who specializes in comparative studies on French and English languages, for he will find long selections in Norman dialect, and French written in England in the thirteenth century. The fifth section includes quotations of the fifteenth century poets and prose writers, Alain Chartier, Villon, Commynes, and a scene of the famous comedy, "Maistre Pierre Pathelin."

This book is indeed a remarkable work, which has been composed with the utmost care. Each selection is preceded by a notice, giving details on the original texts, various editions, and bibliography. Its greatest interest lies in the possibility of following step by step the development of the language, its variations, its evolution from one period to the following, and we see it originating from vulgar Latin, passing by the early Middle Ages, and ending with the reign of Louis XI, when it has assumed, not its definitive form, but its modern appearance.

The Historical French Reader will be of a great help to the scholar, to whom it will save time and trouble to compulse large books and to search huge anthologies to find what he is looking for. Conceived on a simple, logical and clear plan, this book is a precious work of erudition.

ANDRÉ M. BENETEAU.

The Progress of Algebra in the Last Quarter of a Century, by David Eugene Smith. Pp. v +86. Ginn and Company.

"This book is a kind of personal letter to you, a teacher of algebra, somewhere, in some high school . . ." These opening words of the preface indicate the audience whom Professor Smith wishes to address. He should not thus restrict himself. The book is of interest to college teachers of mathematics as well, for the changes that are occurring both in the presentation and choice of subject matter will of necessity modify the work of the traditional college courses.

The last quarter of a century has seen a marked change in the attitude of teachers towards algebra. This has been directed largely to shifting the emphasis from mechanical operations with letters and numbers to a development of functional notions, i.e., to the relationships existing between variables. Here enter the use of formulas, which are shorthand statements of relationships; the graph, which is a pictorial representation of the same; the equation, which is a more formal type of formula. To these must be added the study of negative numbers. These four topics are the main points of emphasis now stressed.

How much has so far been accomplished in this direction? Professor Smith tries to show this in the following chapters making up this book: Chap. I, Progress in the Purpose of Algebra; Chap. II, Progress in the Topics of Algebra; Chap. III, Progress in the Teaching of Algebra; Chap. IV, Progress in the Textbook. His story of the progress is interesting throughout. Perhaps the section which interested this reviewer the most was Section 3, Chap. II, on the "Changes in the Nature of the Problems." All teachers have felt at least a silent protest against the unreality of the so-called "real" problems. When is a problem "real"? I am not prepared to say. "What is one man's meat is another man's poison." In the newer textbooks one notes a decided improvement in the construction of such problems, but there remains still much to be desired.

Under the treatment of directed numbers, he gives the following illustration of the product of two negative numbers (evidently an extract from some textbook): "If 4 men to whom you were going to pay $10 apiece leave town before you pay them, how much more money do you have than you would have had if you had paid them? How much is (—4)x(—10)?" Of course, it illustrates perfectly well that the product of two negative numbers is positive, but might it not leave the impression on an unformed mind that because these four men leave town then these debts do not have to be paid?

You can read this book in an hour. You will find in it subject matter for several hours serious thought.

J. NELSON RICE.

Books Received

Educational

Clement, John Addison, Ph.D.: *Principles and Practices of Secondary Education.* New York: Century Co., 1925. Pp. 503+xxl.

Courtis, Stuart Appleton: *Why Children Learn.* Detroit: Courtis Standard Tests, 1807 E. Grand Blvd., 1925. Pp. 271.

Kelly, Rev. M. V., C.S.B.: *Zeal in the Classroom.* Chicago: John P. Daleiden Co. Pp. 232.

Klapper, Paul, Ph.D.: *Teaching Children to Read* (A Manual for Elementary and Junior High Schools). New York: D. Appleton & Co., 1925. Pp. xxii+304.

Terman, Lewis M., Ph.D.; Lima, Margaret, M. A.: *Children's Reading* (A Guide for Parents and Teachers). New York: D. Appleton & Co., 1925. Pp. 363. Price, $2.00.

Textbooks

France, Anatole: *Riquet.* New York: Oxford University Press, American Branch, 1925. Pp. 94. Price, 50 cents.

Hauch, Edward Franklin: *German Grammar for Beginners.* New York: Oxford University Press, American Branch, 1925. Pp. xi+184. Price, 95 cents.

Hoskins, Halford L., Ph.D.: *An Outline of Modern European History.* Garden City, N. Y.: Doubleday, Page & Co., 1925. Pp. xi+138.

Marquette Readers: *Pre-primer Chart.* New York: The Macmillan Co., 1925.

Scudder, Jared W.: *Easy Latin* (A Reader for Beginners). Boston: Allyn & Bacon, 1925. Pp. xviii+307. Price, $1.25.

General

Sister Benigna Consolata Ferrero: *A Life of Love.* Chicago: John P. Daleiden Co., 1925. Pp. 208.

Chetwood, Thomas B., S.J.: *Protestant Christianity.* Philadelphia: The Peter Reilly Co., 1926. Pp. 104.

Henry, Rev. Hugh T., LL.D.: *Papers on Preaching.* Philadelphia: The Peter Reilly Co., 1925. Pp. v+253.

Heuser, Herman J., D.D.: *In the Workshop of St. Joseph.* New York: Benziger Brothers, 1925. Pp. 214. Price, $2.75.

Sisters of Notre Dame: *Thoughts and Prayers about the Rosary for Little Children.* New York: Benziger Brothers, 1925. Pp. 35. Price, 50 cents.

Tynan, Brandon: *The Melody of Youth* (A Comedy of Youth in Three Acts). New York: Samuel French.

Pamphlets

Bergs, Rev. F. J. (editor): *Devotions to St. Anthony of Padua.* Chicago: John P. Daleiden Co.

Bergs, Rev. F. J. (editor): *St. Joseph, Our Patron.* Chicago: John P. Daleiden Co.

Bergs, Rev. F. J. (editor): *Our Queen's Treasure.* Chicago: John P. Daleiden Co.

Duriaux, Very Rev. P., O.P., D.D.: *Sister Benigna Consolata Ferrero.* Chicago: John P. Daleiden.

Edwin, Sister Mary: *The Coming of the Light* (St. Patrick at Tara, A Play in Three Acts). Price, 30 cents.

Emerson, William R. P., M.D.: *The College and Physical Fitness.* Reprinted from Dartmouth Alumni Magazine, February, May and November, 1925.

Ferrero, Sister Benigna Consolate: *Counsels of Jesus.* Chicago: John P. Daleiden.

Jaggar, J. B., S. J.: *The Immaculate Conception.* New York: Paulist Press, 1925.

Mangan, Rev. F., S.J.: *The Real Presence.* New York: Paulist Press, 1925.

McMullen, J. C.: *The Gifts of St. Patrick* (Play in One Act). New York: Samuel French. Price, 30 cents.

McMullen, J. C.: *A Grand Evening* (A Play in One Act). New York: Samuel French. Price, 30 cents.

Sanderson, Virginia: *Long Ago in Judea* (A Christmas Play in Two Scenes). New York: Samuel French. Price, 30 cents.

Stations of the Holy Way of the Cross. Chicago: John P. Daleiden, 1925.

Thompson, Augusta: *Little Canticles of Love.* New York: Paulist Press, 1925.

Thurston, Herbert, S.J.: *Christian Science.* New York: Paulist Press, 1925.

Tynan, Brandon: *Behold the Man* (A Play in One Act). New York: Samuel French. Price, 30 cents.

Tynan, Brandon: *The Northeast Corner* (A Play in One Act). New York: Samuel French. Price, 30 cents.

Watson, Camile C.: *The Legend of the Juggler* (A Medieval Pantomine in Three Tableaux). New York: Samuel French, Price, 30 cents.

Windle, Sir Bertram: *Evolution and Catholicity.* New York: Paulist Press, 1925.

Bureau of Education Publications: Bulletin 1925, No. 22, Abel, James F., *Recent Data on Consolidation of Schools and Transportation of Pupils.* Bulletin, 1925, No. 31, Colwell, N. P., M.D.: *Medical Education,* 1922-1924. Deffenbaugh, W. S.; Bulletin, 1925, No. 27: *Some Recent Movements in City School Systems.* Bulletin, 1925, No. 15, Fox, Florence C.: *Cycles of Garden Life and Plant Life.* Bulletin, 1925, No. 30, Lombard, Ellen C.: *Parent-Teacher Association at Work.* Bulletin, 1925, No. 21: Rogers, James F., M.D.: *Health and Physique of School Children.* Bulletin, 1925, No. 23, *Statistics of Private High School and Academies,* 1923-1924. Bulletin, 1925, No. 18, Vandewalker, Nina C.: *Progress in Kindergarten Education.* Bulletin, 1925, No. 32, Works, George A.: *Agricultural Education.* School Health Studies, No. 10, *Progress and Prospect in School Health Work.*